



**LOUISVILLE - JEFFERSON COUNTY METRO GOVERNMENT
AIR POLLUTION CONTROL DISTRICT
TITLE V OPERATING PERMIT**



Permit No.: 129-97-TV (R2)

Plant ID: 0082

Effective Date: 28 February 2002

Expiration Date: 28 February 2007

UTM Northing: 4230.7

UTM Easting: 602.6

SIC: 2821

NAICS: 325211

AFS: 00082

Permission is hereby given by the Air Pollution Control District of Jefferson County to operate equipment located at:

**Noveon, Inc.
4200 Bells Lane
Louisville, Kentucky 40211**

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. This permit and the authorization to operate the emission units listed shall expire on midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Applicant for Permit: Noveon, Inc.

Responsible Official: Roger K. LaCosse

Title of Responsible Official: Facility Director

Date Application Received: 21 February 1997

Date Application Administratively Complete: 17 April 1997

Date Public Notice Given: 28 January 2001

Reviewing Engineer (37)

Air Pollution Control Officer

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Title V Permit Revisions/Changes

Revision No.	Date of Issuance/ Reissuance	Public Notice Date	Type	Attachment No./Page No.	Description
N/A	02/28/2002	01/28/2001	N/A	Entire Permit	Initial Issuance
1	1/17/2003	12/02/2002	Administrative	Entire Permit	Change in Company Name
2	x/xx/2004	2/8/2004	Significant	1. U-LTX 2. U-Solvent Metal Cleaning 3. General Conditions	1. Incorporate 40 CFR Part 63, Subparts J and UU requirements 2. Revise the frequency of monitoring 3. Incorporate General Condition 37.

Abbreviations and Acronyms

AC	- Additional Condition
AFS	- AIRS Facility Subsystem
AIRS	- Aerometric Information Retrieval System
APCD	- Air Pollution Control District
ASL	- Adjusted Significant Level
atm	- Atmosphere
BACT	- Best Available Control Technology
Btu	- British Thermal Unit
°C	- Degrees Centigrade
CAAA	- Clean Air Act Amendments (15 November 1990)
CEMS	- Continuous Emission Monitoring System
cf	- Cubic foot
DOE	- District Only Enforceable
°F	- Degrees Fahrenheit
FTO	- Flameless Thermal Oxidizer
gal	- Gallon
HAP	- Hazardous Air Pollutant
Hg	- Mercury
hr	- hour
l	- Liter
lbs	- Pounds
m	- Meter
MACT	- Maximum Achievable Control Technology
mg	- Milligram
mm	- Millimeter
MM	- Million
MOCS	- Management of Change System
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
NSPS	- New Source Performance Standards
NSR	- New Source Review
PM	- Particulate Matter
PM ₁₀	- Particulate matter less than 10 microns
PMP	- Preventive Maintenance Plan
ppm	- Parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
RACT	- Reasonably Available Control Technology
RVCM	- Residual Vinyl Chloride Monomer
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
TAL	- Threshold Ambient Limit
TAP	- Toxic Air Pollutant
tpy	- Tons per year
UTM	- Universal Transverse Mercator
VCM	- Vinyl Chloride Monomer
VOC	- Volatile Organic Compound

Preamble

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Air Pollution Control District (APCDJC) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCDJC. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a list of "insignificant activities," which are activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Activities so identified may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply and must be included in the Title V operating permit. No periodic monitoring shall be required for facilities designated as insignificant activities.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)
2. **Compliance Certification** - The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

***US EPA - Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960***

3. **Compliance Schedule** - A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
 - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
 - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.
5. **Emergency Provision**
 - a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense

of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i. An emergency occurred and that the owner or operator can identify the cause of the emergency.
 - ii. The permitted facility was at the time being properly operated.
 - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
 - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement.

(Regulation 2.16, sections 4.7.1 through 4.7.4)

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)
7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.
8. **Enforceability Requirements** - Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation.

(Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)

10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.

11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6) If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)

12. **Insignificant Activities** - The owner or operator shall notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:

- a. Enter the premises to inspect any emissions-related activity or records required in this permit.
- b. Have access to and copy records required by this permit.
- c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
- d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.
(Regulation 2.16, section 4.3.2)

14. **Monitoring and Related Record keeping and Reporting Requirements** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each

calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes.

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)
16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.
18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
24. **Permit Revocation and Termination by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:

- a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
 - c. Knowingly making any false statement in any permit application.
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.
25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
 26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
 27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
 28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
 29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
 30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
 31. **Risk Management Plan (112(r))** - For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
 32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)
 33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.
 34. **Startups, Shutdowns, and Malfunctions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.
 35. **Submittal of Reports, Data, Notifications, and Applications**

- a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

***Air Pollution Control District of Jefferson County
850 Barret Ave
Louisville, KY 40204-1745***

- b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

***US EPA - Region IV
APTMD - 12th floor
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104***

36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following regulations:

FEDERALLY ENFORCEABLE REGULATIONS	
Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance with Emission Standards and Maintenance Requirements
1.06	Source Self-Monitoring and Reporting
1.07	Emissions During Startups, Shutdowns, Malfunctions, and Emergencies
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits

FEDERALLY ENFORCEABLE REGULATIONS	
Regulation	Title
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
5.01	General Provisions (for Hazardous Air Pollutants)
5.03	Potential Hazardous Emissions
6.01	General Provisions (for <i>Existing Affected Facilities</i>)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (for <i>New Affected Facilities</i>)

DISTRICT ONLY ENFORCEABLE REGULATIONS	
Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors in the Ambient Air
2.08	Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Program Fees
8.03	Commuter Vehicle Testing Requirements

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

- a. Any facility having any refrigeration equipment normally containing fifty (50) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added according to 40 CFR 82.166;
- b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166.

- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40CFR82 Subpart A, Production and Consumption Controls.
(Regulation 2.16, section 4.1.5)

U-RES Emission Unit Description: Resin - Chlorination of a resin slurry which is then dried to produce a chlorinated resin.

U-RES Applicable Regulations

Federally Enforceable Regulations		
Number	Subject	Sections
40 CFR 68	Chemical Accident Prevention Provisions.	Subparts A, B, and D through H
5.15	Chemical Accident Prevention Provisions	1
6.09	Standards of Performance for Existing Process Operations	1 through 3; and 5
7.08	Standards of Performance for New Process Operations	1 through 3

District Only Enforceable Regulations		
Number	Subject	Sections
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1 through 6
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1 through 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2

U-RES Emission Points						
ID ("E-RES-" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-RES-" Prefix)
				ID ("C-RES-" Prefix)	Type	
TK-4N	Silo 4, TK-4N	7.08, sec 3.1.2	24.4 lbs/hr	SED-4N	Fabric filter	SED-4N
		7.08, sec 3.1.1	< 20%			
TK-6F	Silo 6, TK-6F	6.09, sec 3.2	15.8 lbs/hr	SED-2F	Fabric filter	SED-2F
		6.09, sec 3.1	< 20%			
SED-1F	Process Collector SED-1F	7.08, sec 3.1.2	5.38 lbs/hr (total) and < 20% (each) (SED-1F and TK-2F)	N/A	N/A	SED-1F
		7.08, sec 3.1.1				
TK-2F	Tank TK-2F	7.08, sec 3.1.2		SED-2C	Fabric filter	SED-2C
		7.08, sec 3.1.1				
CLST-1	Chlorine Railcar Unloading Station, CLST-1	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
CLST-2	Chlorine Railcar Unloading Station, CLST-2	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
CLST-3	Chlorine Railcar Unloading Station, CLST-3	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
CLST-4	Chlorine Railcar Unloading Station, CLST-4	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
TK-14D	Tank TK-14D	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR

U-RES Emission Points						
ID ("E-RES-" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-RES-" Prefix)
				ID ("C-RES-" Prefix)	Type	
TK-4	Tank TK-4	5.11, secs 1 and 6	RACT	SCRBR*	Scrubber	SCRBR*
TK-5	Tank TK-5	5.11, secs 1 and 6	RACT	SCRBR*	Scrubber	SCRBR*
TK-6	Tank TK-6	5.11, secs 1 and 6	RACT	SCRBR*	Scrubber	SCRBR*
SED-17C	Process Collector SED-17C	7.08, sec 3.1.2 7.08, sec 3.1.1	4.5 lbs/hr (total) and < 20% (each) (SED-17C and TK-15C)	N/A	N/A	SED-17C
TK-15C	Silo 15, TK-15C	7.08, sec 3.1.2 7.08, sec 3.1.1		SED-15C	Fabric filter	SED-15C
SED-5C	Process Collector SED-5C	7.08, sec 3.1.2 7.08, sec 3.1.1	1.2 lbs/hr (total) and < 20% (each) (SED-5C and TK-12C or TK-13C)	N/A	N/A	SED-5C
TK-12C	Tank TK-12C	7.08, sec 3.1.2 7.08, sec 3.1.1		N/A	N/A	TK-12C
TK-13C	Tank TK-13C	7.08, sec 3.1.2 7.08, sec 3.1.1		N/A	N/A	TK-13C
B4FUG	Building 4 Fugitives	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
RXCLMTR	Reactor Chlorine Meters	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
RE-3D	Reactor RE-3D	5.11, secs 1 and 6	RACT	SCRBR	Scrubber	SCRBR
RE-4D	Reactor RE-4D	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
RE-5D	Reactor RE-5D	5.11, secs 1 and 6	RACT	SCRBR	Scrubber	SCRBR
RE-6D	Reactor RE-6D	5.11, secs 1 and 6	RACT	SCRBR	Scrubber	SCRBR
RE-7D	Reactor RE-7D	5.11, secs 1 and 6	RACT	SCRBR	Scrubber	SCRBR
RE-8D	Reactor RE-8D	5.11, secs 1 and 6	RACT	SCRBR	Scrubber	SCRBR
TK-1E	Tank TK-1E	N/A	N/A	SCRBR or N/A	Scrubber	SCRBR or Fugitive
TK-2E	Tank TK-2E	N/A	N/A	SCRBR or N/A	Scrubber	SCRBR or Fugitive
TK-3E	Tank TK-3E	N/A	N/A	SCRBR or N/A	Scrubber	SCRBR or Fugitive
TK-1F	Tank TK-1F	N/A	N/A	N/A and SCRBR**	N/A and Scrubber	TK-1F and SCRBR**
SED-1J2	Process Collector SED-1J2	7.08, sec 3.1.2 7.08, sec 3.1.1	0.45 lbs/hr < 20%	N/A	N/A	BL-1J2
DR-1J	Dryer DR-1J	7.08, sec 3.1.2 7.08, sec 3.1.1	2.5 lbs/hr < 20%	SED-1J1, 2J1, and 1J4	Dual parallel cyclone and Wet scrubber	SED-1J4
SED-16C	Process Collector SED-16C	7.08, sec 3.1.2 7.08, sec 3.1.1	2.0 lbs/hr < 20%	N/A	N/A	SED-16C
TK-9C	Silo 9, TK-9C	6.09, sec 3.2 6.09, sec 3.1	15.8 lbs/hr < 20%	SED-9C	Fabric filter	SED-9C
TK-10C	Silo 10, TK-10C	6.09, sec 3.2 6.09, sec 3.1	15.8 lbs/hr < 20%	SED-10C	Fabric filter	SED-10C
SED-3C	Process Collector SED-3C	7.08, sec 3.1.2 7.08, sec 3.1.1	1.2 lbs/hr and < 20% (SED-3C and TK-2C or TK-7C)	N/A	N/A	SED-3C
SED-4C	Process Collector SED-4C	7.08, sec 3.1.2 7.08, sec 3.1.1	1.2 lbs/hr and < 20% (SED-4C and TK-2C or TK-7C)	N/A	N/A	SED-4C

U-RES Emission Points						
ID ("E-RES-" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-RES-" Prefix)
				ID ("C-RES-" Prefix)	Type	
TK-2C	Tank TK-2C	7.08, sec 3.1.2	1.2 lbs/hr and < 20% (TK-2C and SED-3C or SED-4C)	N/A	N/A	TK-2C
		7.08, sec 3.1.1				
TK-7C	Tank TK-7C	7.08, sec 3.1.2	1.2 lbs/hr and < 20% (TK-7C and SED-3C or SED-4C)	N/A	N/A	TK-7C
		7.08, sec 3.1.1				
RE-9D	Reactor RE-9D	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
RE-10D	Reactor RE-10D	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
RE-11D	Reactor RE-11D	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
RE-12D	Reactor RE-12D	5.12, secs 1 and 5	BACT	SCRBR	Scrubber	SCRBR
TK-7E	Tank TK-7E	N/A	N/A	SCRBR or N/A	Scrubber or N/A	SCRBR or TK-7E
TK-8E	Tank TK-8E	N/A	N/A	SCRBR or N/A	Scrubber or N/A	SCRBR or TK-8E
TK-9E	Tank TK-9E	N/A	N/A	SCRBR or N/A	Scrubber	SCRBR or TK-8E
CL-2E	Stripper CL-2E (Condenser TK-11E optional) ^{***}	N/A	N/A	N/A	N/A	CL-2E
TK-10E	Tank TK-10E	N/A	N/A	SCRBR or N/A	Scrubber or N/A	SCRBR or TK-10E
SED-12J	Process Collector SED-12J	7.08, sec 3.1.2	0.45 lbs/hr	N/A	N/A	BL-1J2
		7.08, sec 3.1.1	< 20%			
DR-2J	Dryer DR-2J	7.08, sec 3.1.2	1.15 lbs/hr	SED-13J, 14J, and 15J	Dual parallel cyclone and Wet scrubber	SED-18J
		7.08, sec 3.1.1	< 20%			
BAGR-1J	Bagger BAGR-1J	7.08, sec 3.1.2	4.12 lbs/hr	SED-8J	Fabric filter	SED-8J
		7.08, sec 3.1.1	< 20%			
TK-1A	Silo 1A, TK-1A	6.09, sec 3.2	4 lbs/hr (total) and < 20% (each) (TK-1A and TK-6A)	SED-3J3	Fabric filter	SED-3J3
		6.09, sec 3.1				
TK-6A	Silo 6A, TK-6A	6.09, sec 3.2		SED-2J3	Fabric filter	SED-2J3
		6.09, sec 3.1				
TK-16J	Silo 16J, TK-16J	7.08, sec 3.1.2	3.29 lbs/hr (total) and < 20% (each) (TK-16J and TK-17J)	SED-16J	Fabric filter	SED-16J
		7.08, sec 3.1.1				
TK-17J	Silo 17J, TK-17J	7.08, sec 3.1.2		SED-17J	Fabric filter	SED-17J
		7.08, sec 3.1.1				
TK-1J	Silo 1 (OTT), TK-1J	7.08, sec 3.1.2	3.2 lbs/hr	SED-9J	Fabric filter	SED-9J
		7.08, sec 3.1.1	< 20%			
TK-2J	Silo 2 (OTT), TK-2J	7.08, sec 3.1.2	3.2 lbs/hr	SED-19J	Fabric filter	SED-19J
		7.08, sec 3.1.1	< 20%			
TK-2R	Silo 2A, TK-2R	6.09, sec 3.2	4.5 lbs/hr (total) and < 20% (each) (TK-2R and TK-3R)	SED-2R	Fabric filter	SED-2R
		6.09, sec 3.1				
TK-3R	Silo 3A, TK-3R	6.09, sec 3.2		SED-3R	Fabric filter	SED-3R
		6.09, sec 3.1				
TK-7J	Silo 7A, TK-7J	6.09, sec 3.2	2.25 lbs/hr	SED-10J	Fabric filter	SED-10J
		6.09, sec 3.1	< 20%			

U-RES Emission Points						
ID ("E-RES-" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-RES-" Prefix)
				ID ("C-RES-" Prefix)	Type	
HPR-1J3	Hopper HPR-1J3	7.08, sec 3.1.2 7.08, sec 3.1.1	8.15 lbs/hr (total) and < 20% (each) (HPR-1J3, TK-8J, TK- 9J, TK-13J, and TK- 14J)	SED-1J	Fabric filter	SED-1J
TK-8J	Silo 8A, TK-8J	6.09, sec 3.2 6.09, sec 3.1		SED-4J3	Fabric filter	SED-4J3
TK-9J	Silo 9A, TK- 9J	6.09, sec 3.2 6.09, sec 3.1		SED-5J3	Fabric filter	SED-5J3
TK-13J	Silo 13, TK-13J	6.09, sec 3.2 6.09, sec 3.1		SED-6J3	Fabric filter	SED-6J3
TK-14J	Silo 14, TK-14J	6.09, sec 3.2 6.09, sec 3.1		SED-7J3	Fabric filter	SED-7J3
SED-1W2	B-29 Central Vacuum System Process Collector	7.08, sec 3.1.2 7.08, sec 3.1.1	2.1 lbs/hr < 20%	N/A	N/A	SED-1W2

* Closed pressure vessel; however, fugitive header and storage tank vent are controlled by scrubber system, SCRBR.

** Tank vents to atmosphere (through stack); fugitive leaks are controlled by scrubber system, SCRBR.

*** Optional equipment to minimize the appearance of the steam discharge from Stripper CL-2E. Emissions are accounted for post-stripper, pre-condenser. Condenser is not a control device.

[†]Compliance Monitoring Reference Codes: **MOCS** - Management of Change System, See Additional Conditions; **MON** - Periodic monitoring required, See Additional Conditions; **ONE** - One-time demonstration that limit cannot be exceeded; **PMP** - Preventive Maintenance Program, See Additional Conditions and Appendix A.

^{††} Regulations 5.11 and 5.12 are District only enforceable.

^{†††} Only hydrochloric acid, an unregulated HAP, is emitted in trace quantities from this Emission Point.

U-RES Additional Conditions:

1. **Standards** (Regulation 2.16, section 4.1.1)
 - a. PM: See U-RES Emission Points Table.
 - b. Opacity: See U-RES Emission Points Table.
 - c. TAPs: See U-RES Emission Points Table.
 - d. Control devices: the owner or operator shall maintain and operate all required control devices as identified in the U-RES Emission Point Table.
2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)
 - a. PM: Where controls are required for compliance with the PM emission standard, as indicated in the U-RES Emission Points Table, a visible emissions survey shall be conducted as specified in Additional Condition 2.b.i and a Preventive Maintenance Program (PMP) shall be implemented, as prescribed in Appendix A.
 - i. Perform or cause to be performed preventive maintenance on pollution control equipment according to the PMP; and
 - ii. Maintain records of the PMP and preventive maintenance performed.
 - iii. If non-compliance occurs, the PMP shall be modified to adequately address the deficiency.
 - iv. Stack testing shall be performed on representative equipment once during the initial permit term at five locations approved by the District, each representing one of the five emission factors, to verify the control efficiencies and emission factors used in the one-time compliance demonstrations for PM. Said testing shall be conducted per the specifications of 40 CFR 60, Appendix A, Methods 1 through 5.
 - b. Opacity:
 - i. For each PM Emission Point subject to Regulation 6.09 (section 3.1) or 7.08 (section 3.1.1) and having a required control device, not cause or permit the discharge of emissions greater than or equal to 20% opacity:
 - 1) The owner or operator shall conduct a daily one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Point (stack) identified in the U-RES Emission Points Table. No more than four Emission Points shall be observed simultaneously.
 - 2) For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a weekly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.

- 3) At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.b.i.1.
- ii. For each PM Emission Point subject to Regulation 6.09 (section 3.1) or 7.08 (section 3.1.1) and *not* having a required control device, not cause or permit the discharge of emissions greater than or equal to 20% opacity:
 - 1) The owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Point (stack) identified in the U-RES Emission Points Table. No more than four Emission Points shall be observed simultaneously.
 - 2) For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
 - 3) At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.b.ii.1.
- c. TAPs:
- i. Comply with Regulation 5.11 as follows:
 - 1) Maintain a MOCS, as approved by the District, to evaluate and document modifications, as defined in Regulation 5.12.
 - 2) If a control device is required for compliance with Regulation 5.11, maintain a PMP as described in Additional Condition 2.c.iii, below.
 - 3) Exempt from Regulation 5.11 any specific pollutant(s) governed by a MACT Standard that is or becomes applicable.
 - ii. Comply with Regulation 5.12 as follows:

- 1) Conduct a compliance or ASL determination for each Regulation 5.12 pollutant or emission source, and for each modification, as defined in Regulation 5.12.
 - 2) Submit, if required, a BACT demonstration for each Regulation 5.12 TAP emission to the District.
 - 3) Maintain a MOCS, as approved by the District, to evaluate and document modifications, as defined in Regulation 5.12.
 - 4) If a control device is required for compliance with Regulation 5.12, maintain a PMP as described in Additional Condition 2.c.iii, below.
 - 5) Exempt from Regulation 5.12 any specific pollutant(s) governed by a MACT Standard that is or becomes applicable.
- iii. Implement a PMP for the control devices required for compliance with Regulation 5.11 or 5.12 as prescribed in Appendix A. The owner or operator shall:
- 1) Perform or cause to be performed preventive maintenance on control devices according to the PMP; and
 - 2) Maintain records of the PMP and preventive maintenance performed.
 - 3) If a non-compliance occurs, the PMP shall be modified to adequately address the deficiency.
3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)
- a. PM: See Additional Condition 2.a.
 - b. Opacity: Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; whether visible emissions were observed; and any corrective action taken. If an Emission Point is not being operated during a given week (or month, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.
 - c. TAPs: The owner or operator shall maintain records as indicated in the MOCS, making these available to the District upon request.
4. **Reporting** (Regulation 2.16, section 4.1.9.3) The owner or operator shall report semi-annually to the District the following:
- a. PM:
 - i. Emission Unit ID number;
 - ii. The beginning and ending date of the reporting period;

- iii. Identification of all periods of exceedances of the hourly PM emission limit including the quantity of excess emissions (or a negative declaration if none); and
 - iv. Reason for excess emissions whether process upset, control device malfunction, other known causes, or unknown causes.
- b. Opacity
- i. Emission Unit ID number and Stack ID number;
 - ii. The beginning and ending date of the reporting period;
 - iii. The date, time, and results of each visible emissions survey conducted that resulted in visible emissions being observed. If no visible emissions were observed during the reporting period, the owner or operator may submit a negative declaration;
 - iv. The date, time and results of each Method 9 or Method 22 conducted (or a negative declaration, if none); and
 - v. Description of any corrective action taken pursuant to Additional Conditions 2.b.i.3 and 2.b.ii.3.
- c. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for the PMP:
- i. Emission Point ID number;
 - ii. The beginning and ending date of the reporting period; and
 - iii. A summary report of the preventive maintenance performed and any corrective actions taken.
5. **Raw Materials Use Flexibility:** Subject to the standards and requirements outlined in this section including the monitoring, record keeping, and reporting requirements, the owner or operator shall be able to use any raw materials containing VOCs, HAPs, TAPs, or PM in the U-RES Emission Unit. The flexibility allowed under this provision does not affect the owner or operator's obligation to comply with the New Source Review requirements found at Regulations 2.04 and 2.05, the Standards of Performance for Emitting Toxic Air Pollutants found at Regulations 5.11 and 5.12, any applicable NESHAP standard, Title V Modifications, or any other requirement determined to be applicable to this Emission Unit.

U-RES Comments/Explanations:

Additional Condition 2.c is for demonstrating compliance with Regulations 5.11 and 5.12, standards of performance for emitting toxic air pollutants (TAPs). This condition is a surrogate for hourly emissions records and will monitor ongoing compliance. Note that VOC and HAP emissions record keeping and reporting are specified elsewhere in this permit.

U-CMP Emission Unit Description: Compounding - Compounding of resin into powders or pellets.

U-CMP Applicable Regulations

Federally Enforceable Regulations		
Number	Subject	Sections
7.08	Standards of Performance for New Process Operations	1 through 3
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 5; 7 and 8
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	2.1

District Only Enforceable Regulations		
Number	Subject	Sections
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1 through 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2

U-CMP Emission Points						
ID ("E-CMP-" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-CMP-"Prefix)
				ID ("C-CMP-" Prefix)	Type	
SED-10R	Resin Unloading Process Collector SED-10R	7.08, sec 3.1.2	5.5 lbs/hr	N/A	N/A	SED-10R
		7.08, sec 3.1.1	< 20%			
B31WS	B-31 Weigh Station	7.08, sec 3.1.2	0.01 lbs/hr	SED-3D	Fabric filter	SED-3D
		7.08, sec 3.1.1	< 20%			
		5.12, secs 1 and 5	BACT			
B3WS	B-3 Weigh Station	7.08, sec 3.1.2	0.01 lbs/hr	SED-4D	Fabric filter	SED-4D
		7.08, sec 3.1.1	< 20%			
		5.12, secs 1 and 5	BACT			
TK-1S	Storage Tank TK-1S	7.12, sec 3.3	Submerged Fill	N/A	N/A	Fugitive
TK-2S	Storage Tank TK-2S	7.12, sec 3.3	Submerged Fill	N/A	N/A	Fugitive
SED-1D	B-31 Central Vacuum Cleaning System Process Cyclone Collector SED-1D	7.08, sec 3.1.2	0.2 lbs/hr	SED-2D	Fabric filter	BL-1D and BL-2D
		7.08, sec 3.1.1	< 20%			
		5.12, secs 1 and 5	BACT			

U-CMP Emission Points						
ID ("E-CMP-" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-CMP-"Prefix)
				ID ("C-CMP-" Prefix)	Type	
DB-1M-1	No. 1 Resin Day Bin DB-1M-1	7.08, sec 3.1.2	1.5 lbs/hr	SED-1M-1	Fabric filter	SED-1M-1
		7.08, sec 3.1.1	< 20%			
DB-2M-1	No. 2 Resin Day Bin DB-2M-1	7.08, sec 3.1.2	1.5 lbs/hr	SED-4M-1	Fabric filter	SED-4M-1
		7.08, sec 3.1.1	< 20%			
HPR-5M-1	Hopper HPR-5M-1	Included with MI-1M-1		SED-3M-1	Fabric filter	SED-3M-1
MI-1M-1	Mixer MI-1M-1	7.25, sec 2.1	See Comment 1	N/A	N/A	SED-3M-1 and Fugitive
		7.08, sec 3.1.2	1.5 lbs/hr	SED-3M-1	Fabric filter	
		7.08, sec 3.1.1	< 20%			
		5.12, secs 1 and 5	BACT			
SED-2M-1	Rework Hopper-Loader HPR-1/ SED-2M-1	7.08, sec 3.1.2	0.3 lbs/hr	N/A	N/A	CM-1M-1
		7.08, sec 3.1.1	< 20%			
BS-1B-1	Blend Silo BS-1B-1	7.08, sec 3.1.2	1.5 lbs/hr	SED-1B-1	Fabric filter	SED-1B-1
		7.08, sec 3.1.1	< 20%			
BS-2B-1	Blend Silo BS-2B-1	7.08, sec 3.1.2	1.5 lbs/hr	SED-2B-1	Fabric filter	SED-2B-1
		7.08, sec 3.1.1	< 20%			
BS-3B-1	Blend Silo BS-3B-1	7.08, sec 3.1.2	1.5 lbs/hr	SED-3B-1	Fabric filter	SED-3B-1
		7.08, sec 3.1.1	< 20%			
BS-4B-1	Blend Silo BS-4B-1	7.08, sec 3.1.2	1.5 lbs/hr	SED-4B-1	Fabric filter	SED-4B-1
		7.08, sec 3.1.1	< 20%			
BS-5B-1	Blend Silo BS-5B-1	7.08, sec 3.1.2	1.5 lbs/hr	SED-5B-1	Fabric filter	SED-5B-1
		7.08, sec 3.1.1	< 20%			
BS-6B-1	Blend Silo BS-6B-1	7.08, sec 3.1.2	2.5 lbs/hr	SED-6B-1	Fabric filter	SED-6B-1
		7.08, sec 3.1.1	< 20%			
HPR-2P-1	Hopper HPR-2P-1	7.08, sec 3.1.2	0.5 lbs/hr	SED-2P-1	Fabric filter	SED-2P-1
		7.08, sec 3.1.1	< 20%			
HPR-1P-1	Hopper HPR-1P-1	7.08, sec 3.1.2	0.5 lbs/hr	SED-1P-1	Fabric filter	SED-1P-1
		7.08, sec 3.1.1	< 20%			
HPR-1L	Bulk Loading Hopper HPR-1L	7.08, sec 3.1.2	0.5 lbs/hr	SED-1L-1	Fabric filter	SED-1L-1
		7.08, sec 3.1.1	< 20%			
LS-1L-1	Railcar Loading Station LS-1L-1	Included with BS-2B-1		SED-2B-1	Fabric filter	SED-2B-1
LS-2L-1	Railcar Loading Station LS-2L-1	Included with BS-3B-1		SED-3B-1	Fabric filter	SED-3B-1
LS-3L-1	Railcar Loading Station LS-3L-1	Included with BS-4B-1		SED-4B-1	Fabric filter	SED-4B-1
LS-4L-1	Railcar Loading Station LS-4L-1	Included with BS-5B-1		SED-5B-1	Fabric filter	SED-5B-1
LS-5L-1	Railcar Loading Station LS-5L-1	Included with BS-6B-1		SED-6B-1	Fabric filter	SED-6B-1
DB-1M-2	No. 1 Resin Day Bin DB-1M-2	7.08, sec 3.1.2	0.88 lbs/hr	SED-1M-2	Fabric filter	SED-1M-2
		7.08, sec 3.1.1	< 20%			
DB-2M-2	No. 2 Resin Day Bin DB-2M-2	7.08, sec 3.1.2	0.88 lbs/hr	SED-2M-2	Fabric filter	SED-2M-2
		7.08, sec 3.1.1	< 20%			

U-CMP Emission Points						
ID ("E-CMP-" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-CMP-"Prefix)
				ID ("C-CMP-" Prefix)	Type	
MI-1M-2	Mixer MI-1M-2	7.25, sec 2.1	See Comment 1	N/A	N/A	SED-3M-2 and Fugitive
		7.08, sec 3.1.2	0.5 lbs/hr	SED-3M-2	Fabric filter	
		7.08, sec 3.1.1	< 20%			
HPR-3M-2	Hopper HPR-3M-2	Included with MI-1M-2		SED-3M-2	Fabric filter	SED-3M-2
FE-14FM-2	Hopper/Feeder FE-14FM-2	Included with SED-1D		SED-2D	Fabric filter	BL-1D and BL-2D
CLR-1C-2	Cooler CLR-1C-2	7.08, sec 3.1.2	0.5 lbs/hr	SED-3C-2	Fabric filter	SED-3C-2
		7.08, sec 3.1.1	< 20%			
		5.12, secs 1 and 5	BACT			
HPR-1C-2	Hopper HPR-1C-2	Included with CLR-1C-2		SED-3C-2	Fabric filter	SED-3C-2
SED-1FE-2	Rework Hopper-Loader HPR-1/SED-1FE-2	7.08, sec 3.1.2	0.25 lbs/hr	N/A	N/A	CM-1FE-2
		7.08, sec 3.1.1	< 20%			
EXT-3E-2	Extruder EXT-3E-2	5.12, secs 1 and 5	TAL	N/A	N/A	BL-1E-2
SED-5EC-2	Conveying Process Cyclone SED-5EC-2	7.08, sec 3.1.2	0.25 lbs/hr	N/A	N/A	SED-5EC-2
		7.08, sec 3.1.1	< 20%			
EXT-2E-2	Extruder EXT-2E-2	5.12, secs 1 and 5	TAL	N/A	N/A	BL-1E-2
SED-2EC-2	Conveying Process Cyclone SED-2EC-2	7.08, sec 3.1.2	0.25 lbs/hr	N/A	N/A	SED-2EC-2
		7.08, sec 3.1.1	< 20%			
EXT-1E-2	Extruder EXT-1E-2	5.12, secs 1 and 5	TAL	N/A	N/A	BL-1E-2
SED-1EC-2	Conveying Process Cyclone SED-1EC-2	7.08, sec 3.1.2	0.25 lbs/hr	N/A	N/A	SED-1EC-2
		7.08, sec 3.1.1	< 20%			
CLR-2EC-2	Cooler CLR-2EC-2	7.08, sec 3.1.2	0.25 lbs/hr	SED-4EC-2	Cyclon e	SED-4EC-2
		7.08, sec 3.1.1	< 20%			
CLR-1EC-2	Cooler CLR-1EC-2	7.08, sec 3.1.2	0.25 lbs/hr	SED-3EC-2	Cyclon e	SED-3EC-2
		7.08, sec 3.1.1	< 20%			
SED-1L-2	Pellet Railcar Loading Process Cyclone SED-1L-2	7.08, sec 3.1.2	0.25 lbs/hr	N/A	N/A	SED-1L-2
		7.08, sec 3.1.1	< 20%			

[†]Compliance Monitoring Reference Codes: **MOCS** - Management of Change System, See Additional Conditions; **MON** - Parametric monitoring required, See Additional Conditions; **ONE** - One-time demonstration that limit cannot be exceeded; **PMP** - Preventive Maintenance Program, See Additional Conditions and Appendix A; **NONE** - No Compliance Monitoring is required.

^{††} Regulations 5.11 and 5.12 are District only enforceable.

U-CMP Additional Conditions:

1. **Standards** (Regulation 2.16, section 4.1.1)
 - a. PM: See U-CMP Emission Points Table.
 - b. Opacity: See U-CMP Emission Points Table.
 - c. TAPs: See U-CMP Emission Points Table.
 - d. Control devices: the owner or operator shall maintain and operate all required control devices as identified in the U-CMP Emission Point Table.
2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)
 - a. PM:
 - i. For PM Emission Point E-CMP-SED-10R, subject to Regulation 7.08 (section 3.1.2), monitor compliance with the allowable hourly PM emission rate by calculating and recording daily an average hourly emission rate using the following formula:

$$PM = A \times B \times (1 - C)$$

Where:

A = Material throughput (expressed in lbs/hr);

B = Load factor (the amount of material the collector “sees”; expressed as a decimal); and

C = Control efficiency (expressed as a decimal).

- ii. Where controls are required for compliance with the PM emission standard, as indicated in the U-CMP Emission Points Table, a visible emissions survey shall be conducted as specified in Additional Condition 2.b.i and a Preventive Maintenance Program (PMP) shall be implemented, as prescribed in Appendix A.
 - 1) Perform or cause to be performed preventive maintenance on pollution control equipment according to the PMP; and
 - 2) Maintain records of the PMP and preventive maintenance performed.
 - 3) If non-compliance occurs, the PMP shall be modified to adequately address the deficiency.
- iii. Stack testing shall be performed on representative equipment once during the initial permit term at five locations approved by the District, each representing one of the five emission factors, to verify the control efficiencies and emission factors used in the one-time compliance demonstrations for PM. Said testing shall be conducted per the specifications of 40 CFR 60, Appendix A, Methods 1 through 5.

b. Opacity:

- i. For each PM Emission Point subject to Regulation 7.08 (section 3.1.1) and having a required control device, not cause or permit the discharge of emissions greater than or equal to 20% opacity:
 - 1) The owner or operator shall conduct a daily one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Point (stack) identified in the U-CMP Emission Points Table. No more than four Emission Points shall be observed simultaneously.
 - 2) For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a weekly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
 - 3) At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in item 2.b.i.1.
- ii. For each PM Emission Point subject to Regulation 6.09 (section 3.1) or 7.08 (section 3.1.1) and *not* having a required control device, not cause or permit the discharge of emissions greater than or equal to 20% opacity:
 - 1) The owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of the PM Emission Point (stack) identified in the U-RES Emission Points Table. No more than four Emission Points shall be observed simultaneously.
 - 2) For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and daylight hours. No more than four Emission Points shall be observed simultaneously.
 - 3) At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance.

Subsequent visible emission surveys shall be conducted as indicated in item 2.b.ii.1.

c. TAPs:

i. Comply with Regulation 5.12 as follows:

- 1) Conduct a compliance or ASL determination for each Regulation 5.12 pollutant or emission source, and for each modification, as defined in Regulation 5.12.
- 2) Submit, if required, a BACT demonstration for each Regulation 5.12 TAP emission to the District.
- 3) Maintain a MOCS, as approved by the District, to evaluate and document modifications, as defined in Regulation 5.12.
- 4) If a control device is required for compliance with Regulation 5.12, maintain a PMP as described in Additional Condition 2.c.ii, below.
- 5) Exempt from Regulation 5.12 any specific pollutant(s) governed by a MACT Standard that is or becomes applicable.

ii. Implement a PMP for the control devices required for compliance with Regulation 5.12 as prescribed in Appendix A.

- 1) Perform or cause to be performed preventive maintenance on control devices according to the PMP; and
- 2) Maintain records of the PMP and preventive maintenance performed.
- 3) If a non-compliance occurs, the PMP shall be modified to adequately address the deficiency.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

a. PM: See Additional Condition 2.a. Additionally, for Emission Point E-CMP-SED-10R the owner or operator shall keep daily records of the following to support the calculations required in Additional Condition 2.a.i:

- i. Amount of materials processed in tons (or pounds) per day; and
- ii. Hours of operation.

b. Opacity: Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; whether visible emissions were observed; and any corrective action taken. If an Emission Point is not being operated during a given week (or month, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record.

- c. TAPs: The owner or operator shall maintain records as indicated in the MOCS, making these available to the District upon request.
4. **Reporting** (Regulation 2.16, section 4.1.9.3) The owner or operator shall report semi-annually to the District the following:
- a. PM - Hourly Emission Limits:
 - i. Emission Unit ID number;
 - ii. The beginning and ending date of the reporting period;
 - iii. Identification of all periods of exceedances of the hourly PM emission limit including the quantity of excess emissions (or a negative declaration if none); and
 - iv. Reason for excess emissions whether process upset, control device malfunction, other known causes, or unknown causes
 - b. Opacity
 - i. Emission Unit ID number and Stack ID number;
 - ii. The beginning and ending date of the reporting period;
 - iii. The date, time, and results of each visible emissions survey conducted that resulted in visible emissions being observed. If no visible emissions were observed during the reporting period, the owner or operator may submit a negative declaration;
 - iv. The date, time and results of each Method 9 or Method 22 conducted (or a negative declaration, if none); and
 - v. Description of any corrective action taken pursuant to Additional Conditions 2.b.i.3 and 2.b.ii.3.
 - c. The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for the PMP:
 - i. Emission Point ID number;
 - ii. The beginning and ending date of the reporting period; and
 - iii. A summary report of the preventive maintenance performed and any corrective actions taken.
5. **Raw Materials Use Flexibility:** Subject to the standards and requirements outlined in this section including the monitoring, record keeping, and reporting requirements, the owner or operator shall be able to use any raw materials containing VOCs, HAPs, TAPs, or PM in the U-CMP Emission Unit. The flexibility allowed under this provision does not affect the owner or operator's obligation to comply with the New Source Review requirements found at Regulation 2.04 and 2.05, the Standards of Performance for Emitting Toxic Air Pollutants

found at Regulations 5.11 and 5.12, any applicable NESHAP standard, Title V Modifications, or any other requirement determined to be applicable to this Emission Unit.

U-CMP Comments/Explanations:

1. Noveon has demonstrated its potential, source-wide, VOC emissions are less than five tons per year for facilities (i.e., Emission Points) subject to Regulation 7.25 (section 2.1). Since this demonstration is based on uncontrolled VOC emissions, no monitoring, record keeping, or reporting are required.
2. District Only Enforceable Condition 2.c is for demonstrating compliance with Regulation 5.12, standards of performance for emitting toxic air pollutants (TAPs). This condition is a surrogate for hourly emissions records and will monitor ongoing compliance. Note that VOC and HAP emissions record keeping and reporting are specified elsewhere in this permit.
3. Uncontrolled PM Emission Points handling *only* pellets (monitoring indicated as “NONE”) are not required to monitor opacity.

U-LTX Emission Unit Description: Latex - Polymerization of various monomers, including vinyl chloride monomer (VCM), into product.

U-LTX Applicable Regulations

Federally Enforceable Regulations		
Number	Subject	Sections
40 CFR 61	Subpart A, General Provisions	61.01 through 61.19
40 CFR 63 Subparts A, J, and UU	General Provisions	63.1(a)(1) through (8); 63.1(a)(13) & 63.1 (a)(14); 63.1(b) through (e), except for reference to 63.10 for record keeping; 63.5, except for references to 63.6
	National Emission Standards for Polyvinyl Chloride and Copolymers Production	63.210 through 63.217
	National Emission Standards for Equipment Leaks—Control Level 2 Standards	63.1013 through 63.1039
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A, B, and D through H
5.15	Chemical Accident Prevention Provisions	1
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	1 through 5
6.24	Standard of Performance for Existing Sources Using Organic Materials	1 through 5; and 7
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1 through 5; 7 and 8
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	1 through 5

District Only Enforceable Regulations		
Number	Subject	Sections
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference (40 CFR 61 Subparts A, F, and V)	1.1, 1.6, 1.19; and 3 through 5
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1 through 6
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1 through 5
5.14	Hazardous Air Pollutants and Source Categories	1 and 2

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
TFRU	Monomer Railcar Unloading	5.11, secs 1 and 6	RACT -Vapor Return to Railcar	N/A	N/A	Fugitive
TK-301	Tank TK-301 1942	5.11, secs 1 and 6	ASL	N/A	N/A	TK-301
TK-302	Tank TK-302 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-302
TK-303	Tank TK-303 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-303
TK-304	Tank TK-304 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-304
TK-305	Tank TK-305 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-305
TK-306	Tank TK-306 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-306
TK-307	Tank TK-307 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-307
TK-308	Tank TK-308 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-308
TK-309	Tank TK-309 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-309
TK-310***	Tank TK-310 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-310
		5.12, secs 1 and 5	BACT			
TK-311***	Tank TK-311 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-311
		5.12, secs 1 and 5	BACT			
TK-312***	Tank TK-312 1942	6.13, sec 3.3	Submerged Fill	N/A	N/A	TK-312
		5.12, secs 1 and 5	BACT			
TK-313	Tank TK-313 1942	6.13, sec 3.3	Exempt-Vapor Pressure	N/A	N/A	TK-313
SEB121TU	Truck Unloading Station (SE Corner B-121)	5.11, secs 1 and 6	TAL	N/A	N/A	Fugitive
PH1TK	No. 1 pH Scale Tank (pH 1)	5.12, secs 1 and 5	TAL	N/A	N/A	PH1TK
MON1TK	Monomer 1 Tank 1947	6.13, sec 3.3	Submerged Fill	N/A	N/A	MON1TK
MON2TK	Monomer 2 Tank 1947	6.13, sec 3.3	Submerged Fill	N/A	N/A	MON2TK
MON3TK	Monomer 3 Tank 1948	6.13, sec 3.3	Submerged Fill	N/A	N/A	MON3TK
PLY-1	Tank	5.15	See AC's	N/A	N/A	N/A
PLY-6	Tank	5.15	See AC's	N/A	N/A	N/A
PLY-8	Tank	5.15	See AC's	N/A	N/A	N/A
PLY-7*	Polymerizer PLY-7	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
			10 ppm (3-hr avg) See AC's			
		6.24, sec 3.3	Submerged Fill			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
PLY-19*	Polymerizer PLY-19	7.12, sec 3.3	Exempt-Vapor Pressure	N/A	N/A	121VS and Fugitive
		5.12, secs 1 and 5	BACT			
PLY-22*	Polymerizer PLY-22	7.12, sec 3.3	Exempt-Vapor Pressure	N/A	N/A	121VS and Fugitive
		5.11, secs 1 and 6	RACT			
PLY-20*	Polymerizer PLY-20	7.12, sec 3.3	Exempt-Vapor Pressure	N/A	N/A	121VS and Fugitive
		5.12, secs 1 and 5	TAL			
PLY-24*	Polymerizer PLY-24	7.12, sec 3.3	Exempt-Vapor Pressure	N/A	N/A	121VS and Fugitive
		5.11, secs 1 and 6	TAL			
PLY-13*	Polymerizer PLY-13	6.13, sec 3.3	See AC 1.a.ii.	N/A	N/A	Fugitive
		5.11, secs 1 and 6	TAL			
PLY-15*	Polymerizer PLY-15	6.13, sec 3.3	See Comment 2	N/A	N/A	Fugitive
		5.11, secs 1 and 6	TAL			
PLY-3*	Polymerizer PLY-3	6.13, sec 3.3	See AC 1.a.ii.	N/A	N/A	Fugitive and PLY-3
		5.12, secs 1 and 5	TAL and BACT			
PLY-9*	Polymerizer PLY-9	6.13, sec 3.3	See AC 1.a.ii.	N/A	N/A	Fugitive and PLY-9
		5.12, secs 1 and 5	TAL and BACT			
PLY-10*	Polymerizer PLY-10	6.13, sec 3.3	See AC 1.a.ii.	N/A	N/A	Fugitive and PLY-10
		5.12, secs 1 and 5	TAL and BACT			
PLY-11*	Polymerizer PLY-11	6.13, sec 3.3	See AC 1.a.ii.	N/A	N/A	Fugitive and PLY-11
		5.12, secs 1 and 5	TAL and BACT			
PLY-21*	Polymerizer PLY-21	6.13, sec 3.3	See AC 1.a.ii.	N/A	N/A	Fugitive and PLY-21
		5.11, secs 1 and 6	TAL			
PLY-23*	Polymerizer PLY-23	6.13, sec 3.3	See AC 1.a.ii.	N/A	N/A	Fugitive and PLY-23
		5.11, secs 1 and 6	TAL			
GLS-18TK1	GLS-18 Tank in Sope Room (No. 1 Tank is East Tank)	6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3	N/A	N/A	Fugitive
		5.11, secs 1 and 6	TAL			
GLS-18TK2	GLS-18 Tank in Sope Room (No. 2 Tank is West Tank)	6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3	N/A	N/A	Fugitive
		5.11, secs 1 and 6	TAL			
TK-501	Tank TK-501 1994	7.12, sec 3.3	Submerged Fill	N/A	N/A	TK-501
PLY-17*	Polymerizer PLY-17 1967	6.13, sec 3.3	Exempt-Vapor Pressure	N/A	N/A	PLY-17/18
PLY-18*	Polymerizer PLY-18 1967	6.13, sec 3.3	Exempt-Vapor Pressure	N/A	N/A	PLY-17/18
TK-SOP-1	Tank TK-SOP-1	7.12, sec 3.3	Submerged Fill	N/A	N/A	Fugitive

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
SCLTK1	No. 1 Scale Tank 1964	6.13, sec 3.3	Submerged Fill	N/A	N/A	SCLTK1/2/ 3/4/5/6
SCLTK2	No. 2 Scale Tank 1964	6.13, sec 3.3	Submerged Fill	N/A	N/A	SCLTK1/2/ 3/4/5/6
SCLTK3	No. 3 Scale Tank 1964	6.13, sec 3.3	Submerged Fill	N/A	N/A	SCLTK1/2/ 3/4/5/6
SCLTK4	No. 4 Scale Tank 1964	6.13, sec 3.3	Submerged Fill	N/A	N/A	SCLTK1/2/ 3/4/5/6
SCLTK5	No. 5 Scale Tank 1961	6.13, sec 3.3	Submerged Fill	N/A	N/A	SCLTK1/2/ 3/4/5/6
SCLTK6	No. 6 Scale Tank 1959	6.13, sec 3.3	Submerged Fill	N/A	N/A	SCLTK1/2/ 3/4/5/6
SCLTK7	No. 7 Scale Tank 1959	6.13, sec 3.3	Submerged Fill	N/A	N/A	121VS
SCLTK8	No. 8 Scale Tank 1959	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVC content; or 0.00042 lb VCM/lb product (dry solids basis); See AC's	N/A	N/A	SCLTK8
		6.13, sec 3.3	Submerged Fill			
TK-100	TK-100 Misc. Monomer Feed Tank 1990	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP; See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR-1** or TK-100
			10 ppm (3-hr avg) See AC's			
		7.25, sec 2.1	See Comment 2			
MI-1D/2D/ 3D/4D/5D	Mixers MI-1D/2D/ 3D/4D/5D (5D is a common spare) 1975-76	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP; See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
			10 ppm (3-hr avg) See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See AC's			
PLY-25	Polymerizer PLY-25 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg) See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR-1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See AC's			
		5.11, secs 1 and 6	RACT or TAL and RACT			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
PLY-26	Polymerizer PLY-26 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg) See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See AC's; Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			
PLY-27	Polymerizer PLY-27 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg) See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			
PLY-28	Polymerizer PLY-28 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			
PLY-29	Polymerizer PLY-29 2003	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg) See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		7.25, sec 3	BACT			
		5.12, secs 1 and 6	RACT or TAL and RACT			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
PLY-30	Polymerizer PLY-30 2003	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		7.25, sec 3	BACT			
		5.12, secs 1 and 6	RACT or TAL and RACT			
PLY-31	Polymerizer PLY-31 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			
PLY-32	Polymerizer PLY-32 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			
PLY-37	Polymerizer PLY-37 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
PLY-38	Polymerizer PLY-38 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			
PLY-39	Polymerizer PLY-39 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			
PLY-40	Polymerizer PLY-40 1966	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
		5.11, secs 1 and 6	RACT or TAL and RACT			
PLY-45	Polymerizer PLY-45 2003	40 CFR 63 Subparts J and UU	10 ppm (3-hour avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		7.25, sec 3	BACT			
		5.12, secs 1 and 5	BACT or TAL and BACT			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
PLY-46	Polymerizer PLY-46 2002	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		7.25, sec 3	BACT			
		5.12, secs 1 and 5	BACT or TAL and BACT			
PLY-47	Polymerizer PLY-47 2003	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		7.25, sec 3	BACT			
		5.12, secs 1 and 5	BACT or TAL and BACT			
PLY-48	Polymerizer PLY-48 2002	40 CFR 63 Subparts J and UU	10 ppm (3-hr avg); See AC's	RCVRY, TK-FTO-1, and TK-SCR- 1**, or N/A	Recovery System, FTO, and Scrubber **, or N/A	TK-SCR- 1** or 121VS
			0.00002 lb VCM per lb product (dry solids basis); or 0.00042 lb VCM/lb product (dry solids basis); See AC's			
		7.25, sec 3	BACT			
		5.12, secs 1 and 5	BACT or TAL and BACT			
STR-6	STR-6 No. 6 Latex Product Stripper 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP; See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR- 1**
			10 ppm (3-hr avg); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
FKOTK-6	No. 6 Stripper Foam Knock-Out Tank 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP; See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR- 1**
			10 ppm (3-hr avg); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/day; See Comment 3			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
STR-7	STR-7 No. 7 Latex Product Stripper 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP; See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
			10 ppm (3-hr avg); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
FKOTK-7	No. 7 Stripper Foam Knock-Out Tank 1960	6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
		40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP; See AC's			
			10 ppm (3-hr avg); See AC's			
STR-8	STR-8 No. 8 Latex Product Stripper 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1*
			10 ppm (3-hr avg); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
FKOTK-8	No. 8 Stripper Foam Knock-Out Tank 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP; See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
			10 ppm (3-hr avg); See AC's			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/day;			
STR-9	STR-9 No. 9 Latex Product Stripper 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP; See AC's	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1*
			10 ppm (3-hr avg)			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
FKOTK-9	No. 9 Stripper Foam Knock-Out Tank 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
			10 ppm (3-hr avg)			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
STR-10	STR-10 No. 10 Latex Product Stripper 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
			10 ppm (3-hr avg)			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
FKOTK-10	No. 10 Stripper Foam Knock-Out Tank 1960	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
			10 ppm (3-hr avg)			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR-1**
PLY-33	Plastic Autoclave PLY-33 1966	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
PLY-34	Plastic Autoclave PLY-34 1966	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
PLY-35	Plastic Autoclave PLY-35 1966	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
PLY-36	Plastic Autoclave PLY-36 1966	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
#5BRPTK	No. 5 Burp Tank pre-1979	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR- 1**
			10 ppm (3-hr avg)			
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
#5FKOTK	No. 5 Burp Tank Foam Knock-Out Tank pre-1979	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR- 1**
		6.24, sec 3.3	10 ppm (3-hr avg) 450 lbs/hr and 3000 lbs/ day; See Comment 3			
TK-13C	TK-13C Wastewater Accumulator Tank pre-1979	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR- 1**
			10 ppm by weight			
		6.24, sec 3.3	10 ppm (3-hr avg) See AC's			
PLY-5*	Polymerizer PLY-5 1967; service change 1997	7.12, sec 3	Submerged Fill	N/A	N/A	PLY-5
STR-2	No. 2 Wastewater Stripper Late 1970's	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR- 1**
			10 ppm by weight			
		6.24, sec 3.3	10 ppm (3-hr avg) See AC's			
FKOTK-2	No. 2 Wastewater Stripper Foam Knock-Out Tank Late 1970's	40 CFR 63 Subparts J and UU	Larger of 2% of equipment's vol. or 25 gals, at STP	RCVRY, TK-FTO-1, and TK-SCR-1**	Recovery System, FTO, and Scrubber **	TK-SCR- 1**
			10 ppm by weight			
		6.24, sec 3.3	10 ppm (3-hr avg) See AC's			
18TK	No. 18 Tank 1960	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
19TK	No. 19 Tank 1960	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See. Comment 3			
20TK	No. 20 Tank 1960	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
8TK	No. 8 Tank	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	8TK and Fugitive
		7.25, sec 2.1	See AC's			
9TK	No. 9 Tank	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	9TK and Fugitive
		7.25, sec 2.1	See AC's			
10TK	Latex Storage Tank TK-10 Pre- June 1979	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
11TK	Latex Storage Tank TK-11 Pre- June 1979	40 CFR 63 Subpart J	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
12TK	Latex Storage Tank TK-12 Pre- June 1979	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
13TK	Latex Storage Tank TK-13 Pre- June 1979	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
14TK	Latex Storage Tank TK-14 Pre- June 1979	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
15TK	Latex Storage Tank TK-15 Pre- June 1979	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
SPBT	South Poly Blend Tank (SPBT) pre-1962	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
NPBT	North Poly Blend Tank (NPBT) pre-1962	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
21TK	B-125 Inside Latex Storage Tank #21 Mid-late 1960's	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
22TK	B-125 Inside Latex Storage Tank #22 Mid-late 1960's	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
23TK	B-125 Inside Latex Storage Tank #23 Mid-late 1960's	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
24TK	B-125 Inside Latex Storage Tank #24 Mid-late 1960's	40 CFR 63 Subpart J	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
TK-125	Latex Storage Tank TK-125 1997	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive
		7.25, sec 2.1	See AC's			
BLKLDG	3 Latex Truck and 2 Railcar Loading Stations 1988-89	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive and BLKLDG
		7.25, sec 2.1	See AC's			
DRM-121	B-121 Latex Drumming Line Pre-1962	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive and DRM-121
		6.24, sec 3.3	450 lbs/hr and 3000 lbs/ day; See Comment 3			
DRM-116	B-116 Latex Drumming Line 1995	40 CFR 63 Subparts J and UU	400 ppm daily weighted avg RVCM content; or 0.00042 lb VCM/lb product (dry solids basis)	N/A	N/A	Fugitive and DRM-116
		7.25, sec 2.1	See AC's (See Comment 2)			

U-LTX Emission Points						
ID ("E-LTX" Prefix)	Description	Applicable Regulation(s) ^{††}	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-LTX-" Prefix)
				ID ("C-LTX-" Prefix)	Type	
TK-RED-2	Tank TK-RED-2	5.12, secs 1 and 5	TAL	N/A	N/A	Fugitive or Fugitive and 121VS

* None of the equipment with a designation of PLY-1 through 24 is used for polymerization purposes. These are storage tanks.

Only PLY-7 is operated "in vinyl chloride service."

** When the VGA of Oxy Vinyls, LP (OxyVinyls), formerly The Geon Company, is used in lieu of the FTO (Alternative Operating Scenario), Control ID becomes C-LTX-RCVRY and C-LPA-VGA (OxyVinyls); and Stack ID becomes S-LPA-CL-1P (OxyVinyls).

^{††} Regulations 5.11 and 5.12 are District only enforceable.

*** Tanks TK-310, TK-311, and TK-312 changed service from butadiene to acrylates and other organic compounds.

U-LTX Additional Conditions:**1. Standards** (Regulation 2.16, section 4.1.1)**a. VOC**

- i. For Emission Points subject to Regulation 6.24, the owner or operator shall not allow or cause the VOC (excluding VCM) emissions to exceed 450 pounds per hour and 3,000 pounds per day. (Regulation 6.24, section 3.3)(See Comment 1)
- ii. For Emission Points subject to Regulation 6.13, section 3.3, the owner or operator shall maintain a permanent submerge fill when storing materials with a true vapor pressure, as stored, equal to or greater than 1.5 psia. (Regulation 6.13, section 3.3)
- iii. For Emission Points subject to Regulation 7.12, section 3.3, the owner or operator shall maintain a permanent submerge fill when storing materials with a true vapor pressure, as stored, equal to or greater than 1.5 psia. (Regulation 7.12, section 3.3)
- iv. For Reactor Emission Points subject to Regulation 7.25, the owner or operator shall not allow or cause the VOC emissions to exceed 5 tons per year. The control devices were deemed BACT by the District. (See Comments 3, and 4) (Regulation 7.25, section 3.1)
- v. The owner or operator shall maintain and operate all required control devices as identified in the U-LTX Emission Points Table within the designed operating parameters to assure continued compliance with the terms and conditions of this permit.

b. HAP - Non LDAR (40 CFR 61 Subpart F as referenced by 40 CFR 63 Subpart J)

For Emission Points subject to 40 CFR Part 63, Subpart J: In the event there is a discrepancy between any additional condition of this permit related to a 40 CFR Part 61 or Part 63 applicable requirement and the current applicable Federal Regulation (except for record retention for 5 years), the current Federal Regulation supercedes the permit condition. (See Comments 5 and 6)

- i. An owner or operator of a polyvinyl chloride plant shall comply with the following requirements. [40 CFR 61.64 as referenced by 63.214(a)]
 - 1) Reactors. The following requirements apply to reactors: [40 CFR 61.64(a) as referenced by 40 CFR 63.214(a)]
 - (a) The concentration of vinyl chloride in each exhaust gas stream from each reactor is not to exceed 10 ppm (average for 3-hour period) except as provided in §63.64(a)(2). [40 CFR 61.64(a)(1) as referenced by 40 CFR 63.214(a)]
 - (b) The reactor opening loss from each reactor is not to exceed 0.02 g vinyl chloride/kg (0.00002 lb vinyl chloride/lb) of polyvinyl chloride product, with the product determined on a dry solids basis, except as provided for in §63.64(f)(1). [40 CFR 61.64(a)(2) as referenced by 40 CFR 63.214(a)]

- (c) Manual vent valve discharge. Except for an emergency manual vent valve discharge, there is to be no discharge to the atmosphere from any manual vent valve on a polyvinyl chloride reactor in vinyl chloride service. An emergency manual vent valve discharge means a discharge to the atmosphere which could not have been avoided by taking measures to prevent the discharge. Within 10 days of any discharge to the atmosphere from any manual vent valve, the owner or operator of the source from which the discharge occurs shall submit to the Administrator a report in writing containing information on the source, nature and cause of the discharge, the date and time of the discharge, the approximate total vinyl chloride loss during the discharge, the method used for determining the vinyl chloride loss (the calculation of the vinyl chloride loss), the action that was taken to prevent the discharge, and measures adopted to prevent future discharges. [40 CFR 61.64(a)(3) as referenced by 40 CFR 63.214(a)]
- 2) Stripper. The concentration of vinyl chloride in each exhaust gas stream from each stripper is not to exceed 10 ppm (average for 3-hour period), except as provided in §61.65(a). This requirement does not apply to equipment that has been opened, is out of operation, and met the requirement §61.65(b)(6)(i) before being opened. [61.64(b) as referenced by 40 CFR 63.214(a)]
- 3) Mixing, weighing, and holding containers. The concentration of vinyl chloride in each exhaust gas stream from each mixing, weighing, or holding container in vinyl chloride service which precedes the stripper (or the reactor if the plant has no stripper) in the plant process flow is not to exceed 10 ppm (average for 3-hour period), except as provided in §61.65(a). This requirement does not apply to equipment that has been opened, is out of operation, and met the requirement in §61.65(b)(6)(i) before being opened. [40 CFR 61.64(c) as referenced by 40 CFR 63.214(a)]
- 4) Monomer recovery system. The concentration of vinyl chloride in each exhaust gas stream from each monomer recovery system is not to exceed 10 ppm (average for 3-hour period), except as provided in §61.65(a). This requirement does not apply to equipment that has been opened, is out of operation, and met the requirement in §61.65(b)(6)(i) before being opened. [40 CFR 61.64(d) as referenced by 40 CFR 63.214(a)]
- 5) Sources following the stripper. The following requirement apply to emissions of vinyl chloride to the atmosphere from the combination of all sources following the stripper(s) [or the reactor(s) if the plant has no stripper(s)] in the plant process flow including but not limited to, centrifuges, concentrators, blend tanks, filters, dryers, conveyor air discharges, baggers, storage containers, and inprocess wastewater, except as provided in paragraph (f) of 61.64: [40 CFR 61.64(e) as referenced by 40 CFR 63.214(a)]
 - (a) In polyvinyl chloride plants using stripping technology to control vinyl chloride emissions, the weighted average residual vinyl chloride concentration in all grades of polyvinyl chloride resin processed through the stripping operation on each calendar day, measured immediately after the stripping operation is completed, may not exceed: [40 CFR 61.64(e)(1) as referenced by 40 CFR 63.214(a)]

400 ppm for all other polyvinyl chloride resins, including latex resins, averaged separately for each type of resin; or [40 CFR 61.64(e)(1)(ii) as referenced by 40 CFR 63.214(a)]

- (b) In polyvinyl chloride plants controlling vinyl chloride emissions with technology other than stripping or in addition to stripping, emissions of vinyl chloride to the atmosphere may not exceed: [40 CFR 61.64(e)(2) as referenced by 40 CFR 63.214(a)]

0.4 g/kg (0.0004 lb/lb) product from the strippers [or reactor(s) if the plant has no stripper(s)] for all other polyvinyl chloride resins, including latex resins, with the product determined on a dry solids basis. [40 CFR 61.64(e)(2)(ii) as referenced by 40 CFR 63.214(a)]

- (c) The provisions of this paragraph apply at all times including when off-specification or other types of resins are made. [40 CFR 61.64(e)(3) as referenced by 40 CFR 63.214(a)]

- ii. An owner or operator of an ethylene dichloride, vinyl chloride, and/or polyvinyl chloride plant shall comply with the requirements of this section. [40 CFR 61.65 as referenced by 40 CFR 63.214(a)]

- 1) Relief valve discharge. Except for an emergency relief discharge, and except as provided in §61.65(d), there is to be no discharge to the atmosphere from any relief valve on any equipment in vinyl chloride service. An emergency relief discharge means a discharge which could not have been avoided by taking measures to prevent the discharge. Within 10 days of any relief valve discharge, except for those subject to §61.65(d), the owner or operator of the source from which the relief valve discharge occurs shall submit to the Administrator a report in writing containing information on the source, nature and cause of the discharge, the date and time of the discharge, the approximate total vinyl chloride loss during the discharge, the method used for determining the vinyl chloride loss (the calculation of the vinyl chloride loss), the action that was taken to prevent the discharge, and measures adopted to prevent future discharges. [40 CFR 61.65(a) as referenced by 40 CFR 63.214(a)]

- 2) Fugitive emission sources [40 CFR 61.65(b) as referenced by 40 CFR 63.214(a)]

- (a) Loading and unloading lines. Vinyl chloride emissions from loading and unloading lines in vinyl chloride service which are opened to the atmosphere after each loading or unloading operation are to be minimized as follows:

- (1) After each loading or unloading operation and before opening a loading or unloading line to the atmosphere, the quantity of vinyl chloride in all parts of each loading or unloading line that are to be opened to the atmosphere is to be reduced so that the parts combined contain no greater than 0.0038 m³ (0.13 ft³) of vinyl chloride, at standard temperature and pressure; and [40 CFR 61.65(b)(1)(i) as referenced by 40 CFR 63.214(a)]

- (2) Any vinyl chloride removed from a loading or unloading line in accordance with paragraph (b)(1)(i) of §61.65 is to be ducted through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm (average for 3-hour period), or equivalent as provided in §61.66. [40 CFR 61.65(b)(1)(ii) as referenced by 40 CFR 63.214(a)]
- (b) Leakage from pump, compressor, and agitator seals: [40 CFR 61.65(b)(3) as referenced by 40 CFR 63.214(a)]
- (1) Rotating pumps. Vinyl chloride emissions from seals on all rotating pumps in vinyl chloride service are to be minimized by installing sealless pumps, pumps with double mechanical seals. If double mechanical seals are used, vinyl chloride emissions from the seals are to be minimized by maintaining the pressure between the two seals so that any leak that occurs is into the pump; by ducting any vinyl chloride between the two seals through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm. Compliance with the provisions of 40 CFR part 61 subpart V demonstrates compliance with the provisions of this paragraph. [40 CFR 61.65(b)(3)(i) as referenced by 40 CFR 63.214(a)]
 - (2) Reciprocating pumps. Vinyl chloride emissions from seals on all reciprocating pumps in vinyl chloride service are to be minimized by installing double outboard seals. If double outboard seals are used, vinyl chloride emissions from the seals are to be minimized by maintaining the pressure between the two seals so that any leak that occurs is into the pump; by ducting any vinyl chloride between the two seals through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm. Compliance with the provisions of 40 CFR part 61 subpart V demonstrates compliance with the provisions of this paragraph. [40 CFR 61.65(b)(3)(ii) as referenced by 40 CFR 63.214(a)]
 - (3) Rotating compressor. Vinyl chloride emissions from seals on all rotating compressors in vinyl chloride service are to be minimized by installing compressors with double mechanical seals. If double mechanical seals are used, vinyl chloride emissions from the seals are to be minimized by maintaining the pressure between the two seals so that any leak that occurs is into the compressor; by ducting any vinyl chloride between the two seals through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm. Compliance with the provisions of 40 CFR part 61 subpart V demonstrates compliance with the provisions of this paragraph. [40 CFR 61.65(b)(3)(iii) as referenced by 40 CFR 63.214(a)]
 - (4) Reciprocating compressors. Vinyl chloride emissions from seals on all reciprocating compressors in vinyl chloride service are to be minimized by installing double outboard seals. If double outboard seals are used, vinyl chloride emissions from the seals are to be minimized by maintaining the pressure between the two seals so that any leak that occurs is into the

compressor; by ducting any vinyl chloride between the two seals through a control system from which concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm. Compliance with the provisions of 40 CFR part 61 subpart V demonstrate compliance with the provisions of this paragraph. [40 CFR 61.65(b)(3)(iv) as referenced by 40 CFR 63.214(a)]

- (5) Agitator. Vinyl chloride emissions from seals on all agitators in vinyl chloride service are to be minimized by installing agitators with double mechanical seals. If double mechanical seals are used, vinyl chloride emissions from the seals are to be minimized by maintaining the pressure between the two seals so that any leak that occurs is into the agitated vessel; by ducting any vinyl chloride between the two seals through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm. [40 CFR 61.65(b)(3)(v) as referenced by 40 CFR 63.214(a)]
- (c) Leaks from relief valves. Vinyl chloride emissions due to leaks from each relief valve on equipment in vinyl chloride service shall comply with §61.242-4 of subpart V of this part. [*This would require a permit revision*] [40 CFR 61.65(b)(4) as referenced by 40 CFR 63.214(a)]
- (d) Manual venting of gases. Except as provided in §61.64(a)(3), all gases which are manually vented from equipment in vinyl chloride service are to be ducted through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm (average for 3-hour period). [40 CFR 61.65(b)(5) as referenced by 40 CFR 63.214(a)]
- (e) Opening of equipment. Vinyl chloride emissions from opening of equipment (excluding crude, intermediate, and final EDC storage tanks, but including prepolymerization reactors used in the manufacture of bulk resins and loading or unloading lines that are not opened to the atmosphere after each loading or unloading operation) are to be minimized follows: [40 CFR 61.65(b)(6) as referenced by 40 CFR 63.214(a)]
 - (1) Before opening any equipment for any reason, the quantity of vinyl chloride which is contained therein is to be reduced to an amount which occupies a volume of no more than 2.0 percent of the equipment's containment volume or 0.0950 cubic meters (25 gallons), whichever is larger, at standard temperature and pressure. [40 CFR 61.65(b)(6)(i) as referenced by 40 CFR 63.214(a)]
 - (2) Any vinyl chloride removed from the equipment in accordance with paragraph (b)(6)(i) of 61.65 is to be ducted through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm (average for 3-hour period). [40 CFR 61.65(b)(6)(ii) as referenced by 40 CFR 63.214(a)]

- (f) Samples. Unused portions of samples containing at least 10 percent by weight vinyl chloride are to be returned to the process or destroyed in a control device from which concentration of vinyl chloride in the exhaust gas does not exceed 10 ppm (average for 3-hour period). Sampling techniques are to be such that sample containers in vinyl chloride service are purged into a closed process system. Compliance with the provisions of 40 CFR part 61 subpart V demonstrates compliance with the provisions of this paragraph. [40 CFR 61.65(b)(7) as referenced by 40 CFR 63.214(a)]
- (g) Leak Detection and Elimination. Vinyl chloride emissions due to leaks from equipment in vinyl chloride service are to be minimized as follows: [40 CFR 61.65(b)(8) as referenced by 40 CFR 63.214(a)] (See Comment 17)

A reliable and accurate vinyl chloride monitoring system shall be operated for detection of major leaks and identification of the general area of the plant where a leak is located. A vinyl chloride monitoring system means a device which obtains air samples from one or more points on a continuous sequential basis and analyzes the samples with gas chromatography or if the owner or operator assumes that all hydrocarbons measured are vinyl chloride, with infrared spectrophotometry, flame ion detection, or an equivalent or alternate method. The vinyl chloride monitoring system shall be operated according to a program developed by the plant owner or operator. [61.65(b)(8)(i) as referenced by 40 CFR 63.214(a)]

- (h) Inprocess wastewater. Vinyl chloride emissions to the atmosphere from in process wastewater are to be reduced as follows: [40 CFR 61.65(b)(9) as referenced by 40 CFR 63.214(a)]
 - (1) The concentration of vinyl chloride in each inprocess wastewater stream containing greater than 10 ppm vinyl chloride measured immediately as it leaves a piece of equipment and before being mixed with any other inprocess wastewater stream is to be reduced to no more than 10 ppm by weight before being mixed with any other inprocess wastewater stream which contains less than 10 ppm vinyl chloride; before being exposed to the atmosphere; before being discharged to a wastewater treatment process; or before being discharged untreated as a wastewater. §61.65 (b)(9)(i) does apply to water which is used to displace vinyl chloride from equipment before it is opened to the atmosphere in accordance with §61.64(a)(2) or paragraph (b)(6) of §61.65, but does not apply to water which is used to wash out equipment after the equipment has already been opened to the atmosphere in accordance with §61.64(a)(2) or paragraph (b)(6) of 61.65. [40 CFR 61.65(b)(9)(i) as referenced by 40 CFR 63.214(a)]
 - (2) Any vinyl chloride removed from the inprocess wastewater in accordance with paragraph (b)(9)(i) of §61.65 is to be ducted through a control system from which the concentration of vinyl chloride in the exhaust gases does not exceed 10 ppm (average for 3-hour period); or equivalent as provided in §61.66. [40 CFR 61.65(b)(9)(ii) as referenced by 40 CFR 63.214(a)]

- 3) The requirements in paragraphs (b)(1), (b)(5), (b)(6), (b)(7) and (b)(8) of §61.65 are to be incorporated into a standard operating procedure, and made available upon request for inspection by the Administrator. The standard operating procedure is to include provisions for measuring the vinyl chloride in equipment 4.75 m³ (1255 gal) in volume for which an emission limit is prescribed in §61.65(b)(6)(i) after opening the equipment and using Test Method 106, a portable hydrocarbon detector, or an alternative method. [40 CFR 61.65(c) as referenced by 40 CFR 63.214(a)]
- 4) A RVD that is ducted to a control device that is continually operating while emissions from the release are present at the device is subject to the following requirements: [40 CFR 61.65(d) as referenced by 40 CFR 63.214(a)]

A discharge from a control device other than a flare shall not exceed 10 ppm (average over a 3-hour period) as determined by the continuous emission monitor system required under §61.68. Such a discharge is subject to the requirements of §61.70. [40 CFR 61.65(d)(1) as referenced by 40 CFR 63.214(a)]

c. **HAP - LDAR** (40 CFR Part 63 Subpart UU as referenced by 40 CFR 63 Subpart J)

i. Valves in gas and vapor service and in light liquid service.

The instrument reading that defines a leak is 500 parts per million or greater. [40 CFR 63.1025(b)(2)]

ii. Pumps in light liquid service

- 1) The instrument reading that defines a leak is 5,000 parts per million or greater for pumps handling polymerizing monomers. [40 CFR 63.1026(b)(2)(i)]
- 2) The instrument reading that defines a leak is 1,000 parts per million or greater for all other pumps. [40 CFR 63.1026(b)(2)(iii)]
- 3) For pumps to which a 1,000 parts per million leak definition applies, repair is not required unless an instrument reading of 2,000 parts per million or greater is detected. (40 CFR 63.1026(b)(3) as referenced by 40 CFR 63.1410)

iii. Connectors in gas and vapor service and in light liquid service.

If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected. (63.1027(b)(2) as referenced by 40 CFR 63.1410)

iv. Agitators in gas and vapor service and in light liquid service. (§63.1028)

If an instrument reading equivalent of 10,000 parts per million or greater is measured, a leak is detected. (63.1028(c)(2) as referenced by 40 CFR 63.1410)

- v. Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems standards.

Instrument reading that defines a leak. If an instrument reading of 10,000 parts per million or greater for agitators, 5,000 parts per million or greater for pumps handling polymerizing monomers, 2,000 parts per million or greater for pumps in food and medical service, or 2,000 parts per million or greater for all other pumps (including pumps in food/medical service), or 500 parts per million or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured pursuant to paragraph (b)(1) of §63.1029, a leak is detected and shall be repaired pursuant to §63.1024, as applicable.

- vi. Pressure relief devices in gas and vapor service.

- 1) Except during pressure releases as provided for in paragraph (c) of §63.1030, or as otherwise specified in §§63.1036, 63.1037, or paragraphs (d) and (e) of §63.1030, each pressure relief device in gas and vapor service shall be operated with an instrument reading of less than 500 parts per million as measured by the method specified in §63.1023(b) and, as applicable, §63.1023(c). (40 CFR 63.1030(b) as referenced by 40 CFR 63.1410)
- 2) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release, except as provided in §63.1024(d). (40 CFR 63.1030(c)(1) as referenced by 40 CFR 63.1410)

- vii. Compressors

- 1) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in §§63.1021(b), 63.1036, 63.1037, and paragraphs (e) and (f) of §63.1031. Each compressor seal system shall meet the applicable requirements specified in paragraph (b)(1), (b)(2), or (b)(3) of §63.1024 as follows: (40 CFR 63.1031(b) as referenced by 40 CFR 63.1410)
 - (a) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times (except during periods of startup, shutdown, or malfunction); or (40 CFR 63.1031(b)(1) as referenced by 40 CFR 63.1410)
 - (b) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either §63.1034 or §63.1021(b); or (40 CFR 63.1031(b)(2) as referenced by 40 CFR 63.1410)
 - (c) Equipped with a closed-loop system that purges the barrier fluid directly into a process stream. (40 CFR 63.1031(b)(3) as referenced by 40 CFR 63.1410)

- 2) Barrier fluid system. The barrier fluid shall not be in light liquid service. Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site.

viii. Open-ended valves or lines

- 1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §§63.1021(b), 63.1036, 63.1037, and paragraphs (c) and (d) of 63.1033. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. The operational provisions of paragraphs (b)(2) and (b)(3) of 63.1033 also apply. (40 CFR 63.1033(b)(2) as referenced by 40 CFR 63.1410)
 - 2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. (40 CFR 63.1033(b)(3) as referenced by 40 CFR 63.1410)
 - 3) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (b)(1) of 63.1033 at all other times. (40 CFR 63.1033(c) as referenced by 40 CFR 63.1410)
 - 4) Emergency shutdown exemption. Open-ended valves or lines in an emergency shutdown system that are designed to open automatically in the event of a process upset are exempt from the requirements of paragraph (b) of 63.1033. (40 CFR 63.1033(d) as referenced by 40 CFR 63.1410)
 - 5) Polymerizing materials exemption. Open-ended valves or lines containing materials that would autocatalytically polymerize or, would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 63.1033 (b) are exempt from the requirements of 63.1033 (b).
- ix. General Equipment Identification. Equipment subject to 40 CFR 63 Subpart UU shall be identified. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, by designation of process unit or affected facility boundaries by some form of weatherproof identification, or by other appropriate methods. (40 CFR 63.1022(a) as referenced by 40 CFR 63.1410)
- x. Additional equipment identification. In addition to the general identification required by 63.1022 (a), equipment subject to any of the provisions in 40 CFR §63.1023 through §63.1034 shall be specifically identified as required in (b)(1) through (b)(5) of §63.1022, as applicable. §63.1022(b) does not apply to an owner or operator of a batch product process who elects to pressure test the batch product process equipment train pursuant to 40 CFR 63.1036. (40 CFR 63.1022(b) as referenced by 40 CFR 63.1410)

- 1) Connectors. Except for inaccessible, ceramic, or ceramic-lined connectors meeting the provision of 40 CFR 63.1027(e)(2) and instrumentation systems identified pursuant to (b)(4) of §63.1022, identify the connectors subject to the requirements of 40 CFR 63 Subpart UU. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of 40 CFR 63 Subpart UU are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the identification shall be complete no later than the completion of the initial survey required by §63.1022 (a). (40 CFR 63.1022(b)(1) as referenced by 40 CFR 63.1410)
 - 2) Routed to a process or fuel gas system or equipped with a closed vent system and control device. Identify the equipment that the owner or operator elects to route to a process or fuel gas system or equip with a closed vent system and control device, under the provisions of §63.1026(e)(3) (pumps in light liquid service), 40 CFR 63.1028(e)(3) (agitators), 40 CFR 63.1030(d) (pressure relief devices in gas and vapor service), 40 CFR 63.1031(e) (compressors), or 40 CFR 63.1037(a) (alternative means of emission limitation for enclosed-vented process units). (40 CFR 63.1022(b)(2) as referenced by 40 CFR 63.1410)
 - 3) Pressure relief devices. Identify the pressure relief devices equipped with rupture disks, under the provisions of 40 CFR 63.1030(e). (40 CFR 63.1022(b)(3) as referenced by 40 CFR 63.1410)
 - 4) Instrumentation systems. Identify instrumentation systems subject to the provisions of 40 CFR 63.1029. Individual components in an instrumentation system need not be identified. (40 CFR 63.1022(b)(4) as referenced by 40 CFR 63.1410)
 - 5) Equipment in service less than 300 hours per calendar year. The identity, either by list, location (area or group), or other method, of equipment in regulated material service less than 300 hours per calendar year within a process unit or affected facilities subject to the provisions of 40 CFR 63 Subpart UU shall be recorded. (40 CFR 63.1022(b)(5) as referenced by 40 CFR 63.1410)
- xi. Special equipment designations: Equipment that is unsafe or difficult-to-monitor. (40 CFR 63.1022(c) as referenced by 40 CFR 63.1410)
- 1) Designation and criteria for unsafe-to-monitor. Valves meeting the provisions of 40 CFR 63.1025(e)(1), pumps meeting the provisions of 40 CFR 63.1026(e)(6), connectors meeting the provisions of 40 CFR 63.1027(e)(1), and agitators meeting the provisions of 40 CFR 63.1028(e)(7) may be designated unsafe-to-monitor if the owner or operator determines that monitoring personnel would be exposed to an immediate danger as a consequence of complying with the monitoring requirements of 40 CFR 63 Subpart UU. Examples of unsafe-to-monitor equipment include, but is not limited to, equipment under extreme pressure or heat. (40 CFR 63.1022(c)(1) as referenced by 40 CFR 63.1410)
 - 2) Designation and criteria for difficult-to-monitor. Valves meeting the provisions of 40 CFR 63.1025(e)(2) may be designated difficult-to-monitor if the provisions of

§63.1022(c)(2)(i) apply. Agitators meeting the provisions of 40 CFR 63.1028(e)(5) may be designated difficult-to-monitor if the provisions of §63.1022(c)(2)(ii) apply. (40 CFR 63.1022(c)(2) as referenced by 40 CFR 63.1410)

(a) Valves. (40 CFR 63.1022(c)(2)(i) as referenced by 40 CFR 63.1410)

(1) The owner or operator of the valve determines that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters (7 feet) above a support surface or it is not accessible in a safe manner when it is in regulated material service; and (40 CFR 63.1022(c)(2)(i)(A) as referenced by 40 CFR 63.1410)

(2) The process unit or affected facility within which the valve is located is an existing source, or the owner or operator designates less than 3 percent of the total number of valves in a new source as difficult-to-monitor. (40 CFR 63.1022(c)(2)(i)(B) as referenced by 40 CFR 63.1410)

(b) Agitators. The owner or operator determines that the agitator cannot be monitored without elevating the monitoring personnel more than 2 meters (7 feet) above a support surface or it is not accessible in a safe manner when it is in regulated material service. (40 CFR 63.1022(c)(2)(ii) as referenced by 40 CFR 63.1410)

3) Identification of unsafe or difficult-to-monitor equipment. The owner or operator shall record the identity of equipment designated as unsafe-to-monitor according to the provisions of 63.1022(c)(1) and the planned schedule for monitoring this equipment. The owner or operator shall record the identity of equipment designated as difficult-to-monitor according to the provisions of 63.1022(c)(2), the planned schedule for monitoring this equipment, and an explanation why the equipment is unsafe or difficult-to-monitor. This record must be kept at the plant and be available for review by an inspector. (40 CFR 63.1022(c)(3) as referenced by 40 CFR 63.1410)

4) Written plan requirements. (40 CFR 63.1022(c)(4) as referenced by 40 CFR 63.1410)

(a) The owner or operator of equipment designated as unsafe-to-monitor according to the provisions of 63.1022(c)(1) shall have a written plan that requires monitoring of the equipment as frequently as practical during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. (40 CFR 63.1022(c)(4)(i) as referenced by 40 CFR 63.1410)

(b) The owner or operator of equipment designated as difficult-to-monitor according to the provisions of 63.1022(c)(2) shall have a written plan that requires monitoring of the equipment at least once per calendar year and repair of the equipment according to the procedures in 40 CFR 63.1024 if a leak is detected. (40 CFR 63.1022(c)(4)(ii) as referenced by 40 CFR 63.1410)

- xii. Special equipment designations: Equipment that is unsafe-to-repair. (40 CFR 63.1022(d) as referenced by 40 CFR 63.1410)
 - 1) Designation and criteria. Connectors subject to the provisions of 40 CFR 63.1024(e) may be designated unsafe-to-repair if the owner or operator determines that repair personnel would be exposed to an immediate danger as a consequence of complying with the repair requirements of 40 CFR 63 Subpart UU, and if the connector will be repaired before the end of the next process unit or affected facility shutdown as specified in 40 CFR 63.1024(e)(2). (40 CFR 63.1022(d)(1) as referenced by 40 CFR 63.1410)
 - 2) Identification of equipment. The identity of connectors designated as unsafe-to-repair and an explanation why the connector is unsafe-to-repair shall be recorded. (40 CFR 63.1022(d)(2) as referenced by 40 CFR 63.1410)
- xiii. Identify the compressors that the owner or operator elects to designate as operating with an instrument reading of less than 500 parts per million above background, under the provisions of 40 CFR 63.1031(f). (40 CFR 63.1022(e) as referenced by 40 CFR 63.1410)
- xiv. Leak repair schedule. The owner or operator shall repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as provided in paragraphs (d) and (e) of 63.1024. A first attempt at repair as defined in 40 CFR 63 Subpart UU shall be made no later than 5 calendar days after the leak is detected. First attempt at repair for pumps includes, but is not limited to, tightening the packing gland nuts and/or ensuring that the seal flush is operating at design pressure and temperature. First attempt at repair for valves includes, but is not limited to, tightening the bonnet bolts, and/or replacing the bonnet bolts, and/or tightening the packing gland nuts, and/or injecting lubricant into the lubricated packing. (40 CFR 63.1024(a) as referenced by 40 CFR 63.1410)
- xv. Leak identification removal. (40 CFR 63.1024(c) as referenced by 40 CFR 63.1410)
 - 1) Valves and connectors in gas/vapor and light liquid service. The leak identification on a valve in gas/vapor or light liquid service may be removed after it has been monitored as specified in 40 CFR 63.1025(d)(2), and no leak has been detected during that monitoring. The leak identification on a connector in gas/vapor or light liquid service may be removed after it has been monitored as specified in 40 CFR 63.1027(b)(3)(iv) and no leak has been detected during that monitoring. (40 CFR 63.1024(c)(1) as referenced by 40 CFR 63.1410)
 - 2) Other equipment. The identification that has been placed, pursuant to 40 CFR 63.1023(e)(1), on equipment determined to have a leak, except for a valve or for a connector in gas/vapor or light liquid service that is subject to the provisions of 40 CFR 63.1027(b)(3)(iv), may be removed after it is repaired. (40 CFR 63.1024(c)(2) as referenced by 40 CFR 63.1410)
- xvi. Delay of repair. Delay of repair is allowed for any of the conditions specified in (d)(1) through (d)(5) of 63.1024. The owner or operator shall maintain a record of the facts that explain any

delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown. (40 CFR 63.1024(d) as referenced by 40 CFR 63.1410)

- 1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in 63.1024 (d)(5) (40 CFR 63.1024(d)(1) as referenced by 40 CFR 63.1410)
- 2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service. (40 CFR 63.1024(d)(2) as referenced by 40 CFR 63.1410)
- 3) Delay of repair for valves, connectors, and agitators is also allowed if the provisions of 63.1024 (d)(3)(i) and (d)(3)(ii) are met. (40 CFR 63.1024(d)(3) as referenced by 40 CFR 63.1410)
 - (a) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and (40 CFR 63.1024(d)(3)(i) as referenced by 40 CFR 63.1410)
 - (b) When repair procedures are effected, the purged material is collected and destroyed, collected and routed to a fuel gas system or process, or recovered in a control device complying with either 40 CFR 63.1034 or 40 CFR 63.1021(b). (40 CFR 63.1024(d)(3)(ii) as referenced by 40 CFR 63.1410)
- 4) Delay of repair for pumps is also allowed if the provisions of 63.1024 (d)(4)(i) and (d)(4)(ii) are met. (40 CFR 63.1024(d)(4) as referenced by 40 CFR 63.1410)
 - (a) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of 40 CFR 63.1035(d) will provide better performance or one of the specifications of 63.1024 (d)(4)(i)(A) through 63.1024 (d)(4)(i)(C) are met. (40 CFR 63.1024(d)(4)(i) as referenced by 40 CFR 63.1410)
 - (1) A dual mechanical seal system that meets the requirements of 40 CFR 63.1026 (e)(1) will be installed; (40 CFR 63.1024(d)(4)(i)(A) as referenced by 40 CFR 63.1410)
 - (2) A pump that meets the requirements of 40 CFR 63.1026(e)(2) will be installed; or (40 CFR 63.1024(d)(4)(i)(B) as referenced by 40 CFR 63.1410)
 - (3) A system that routes emissions to a process or a fuel gas system or a closed vent system and control device that meets the requirements of 40 CFR 63.1026(e)(3) will be installed; and (40 CFR 63.1024(d)(4)(i)(C) as referenced by 40 CFR 63.1410)

(b) Repair is completed as soon as practical, but not later than 6 months after the leak was detected. (40 CFR 63.1024(d)(4)(ii) as referenced by 40 CFR 63.1410)

5) Delay of repair beyond a process unit or affected facility shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit or affected facility shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit or affected facility shutdown will not be allowed unless the third process unit or affected facility shutdown occurs sooner than 6 months after the first process unit or affected facility shutdown. (40 CFR 63.1024(d)(5) as referenced by 40 CFR 63.1410)

xvii. Unsafe-to-repair—connectors. Any connector that is designated, as described in 40 CFR 63.1022(d), as an unsafe-to-repair connector is exempt from the requirements of 40 CFR 63.1027(d), and 63.1025 (a). (40 CFR 63.1024(e) as referenced by 40 CFR 63.1410)

d. **HAP (Non-VCM)**

The owner or operator shall limit the emissions of each individual non-VCM HAP to less than 10 tons per year for each individual HAP and less than 25 tons per year for all non-VCM HAPs combined. (See Comment 6)

e. **TAP (Regulations 5.11 and 5.12)**

For all Toxic Air Pollutants not subject to an emission standard established by a 40 CFR Part 61 or Part 63 Federal rule, the owner or operator shall not allow or cause the TAP emissions to exceed the ASL, TAL or RACT/BACT limits, as demonstrated in the District approved modeling and RACT/BACT analysis submitted to the District on December 18, 1998. (See Source-wide TAP Emission Limits Table on Page 92 of this operating permit. (See Comments 7 and 8)

f. **Chemical Accident Prevention Provisions (Regulations 5.15 and 40 CFR Part 68, Subpart G)**

The owner or operator shall comply with the Risk Management Plan submitted to the USEPA on June 21, 1999.

2. **Monitoring (Regulation 2.16, section 4.1.9.1.2)**

a. **VOC**

i. For Emission Points subject to Regulations 6.13 and 7.12, there are no monitoring requirements.

ii. For Emission Points subject to Regulations 6.24:

And 40 CFR Part 63 Subpart J: The monitoring requirements of 40 CFR Part 63, Subpart J are sufficient monitoring for purposes of demonstrating continued compliance with District regulation 6.24.

- iii. For Emission Points subject to Regulations 7.25:

And 40 CFR Part 63 Subpart J: The monitoring requirements of 40 CFR Part 63, Subpart J are sufficient monitoring for purposes of demonstrating continued compliance with District regulation 7.25.

- b. **HAP (Non LDAR)** (40 CFR 61 Subpart F as referenced by 40 CFR 63 Subpart J)

For Emission Points subject to 40 CFR Part 61 Subpart F and 40 CFR Part 63 Subpart J: In the event there is a discrepancy between any additional condition of this permit related to a 40 CFR Part 61 or Part 63 applicable requirement and the current applicable Federal Regulation (except for record retention for 5 years), the current Federal Regulation supercedes the permit condition.

- i. A vinyl chloride monitoring system is to be used to monitor on a continuous basis the emissions from the sources for which emission limits are prescribed in §§61.62(a) and (b), 61.63(a), and 61.64(a)(1), (b), (c), and (d), and for any control system to which reactor emissions are required to be ducted in §61.64(a)(2) or to which fugitive emissions are required to be ducted in §61.65(b)(1)(ii), and (b)(2), (b)(5), (b)(6)(ii), and (b)(9)(ii). [40 CFR 61.68(a) as referenced by 40 CFR 63.214(a)]
- ii. The vinyl chloride monitoring system(s) used to meet the requirement in paragraph (a) of §61.68 is to be a device which obtains representative samples from one or more applicable emission points on a continuous sequential basis and analyzes the samples with gas chromatography or, if the owner or operator assumes that all hydrocarbons measured are vinyl chloride, with infrared spectrophotometry, flame ion detection, or an alternative method. The vinyl chloride monitoring system used to meet the requirements in §61.65(b)(8)(i) may be used to meet the requirements of §61.68. [40 CFR 61.68(b) as referenced by 40 CFR 63.214(a)]
- iii. A daily span check is to be conducted for each vinyl chloride monitoring system used. For all of the emission sources listed in paragraph (a) of this section, except the one for which an emission limit is prescribed in §61.62(b), the daily span check is to be conducted with a concentration of vinyl chloride equal to 10 ppm. For the emission source for which an emission limit is prescribed in §61.62(b), the daily span check is to be conducted with a concentration of vinyl chloride which is determined to be equivalent to the emission limit for that source based on the emission test required by §61.67. The calibration is to be done with either: [40 CFR 61.68(c) as referenced by 40 CFR 63.214(a)]
 - 1) A calibration gas mixture prepared from the gases specified in Sections 7.2.1 and 7.2.2 of Method 106 and in accordance with Section 10.1 of Method 106, or [40 CFR 61.68(c)(1) as referenced by 40 CFR 63.214(a)]
 - 2) A calibration gas cylinder standard containing the appropriate concentration of vinyl chloride. The gas composition of the calibration gas cylinder standard is to have been certified by the manufacturer. The manufacturer must have recommended a maximum shelf life for each cylinder so that the concentration does not change greater than ± 5 percent from the certified value. The date of gas cylinder preparation, certified vinyl chloride concentration and recommended maximum shelf life must have been affixed to

the cylinder before shipment from the manufacturer to the buyer. If a gas chromatograph is used as the vinyl chloride monitoring system, these gas mixtures may be directly used to prepare a chromatograph calibration curve as described in Sections 8.1 and 9.2 of Method 106. The requirements in Sections 7.2.3.1 and 7.2.3.2 of Method 106 for certification of cylinder standards and for establishment and verification of calibration standards are to be followed. [40 CFR 61.68(c)(2) as referenced by 40 CFR 63.214(a)]

- iv. When exhaust gas(es), having emission limits that are subject to the requirement of paragraph (a) of 61.68, are emitted to the atmosphere without passing through the control system and required vinyl chloride monitoring system, the vinyl chloride content of the emission shall be calculated (in units of each applicable emission limit) by best practical engineering judgment based on the discharge duration and known VC concentrations in the affected equipment as determined in accordance with §61.67(h) or other acceptable method. [40 CFR 61.68(d) as referenced by 40 CFR 63.214(a)]
 - v. For each 3-hour period, the vinyl chloride content of emissions subject to the requirements of paragraphs (a) and (d) of 61.68 shall be averaged (weighted according to the proportion of time that emissions were continuously monitored and that emissions bypassed the continuous monitor) for purposes of reporting excess emissions under §61.70(c)(1). [40 CFR 61.68(e) as referenced by 40 CFR 63.214(a)]
 - vi. For each vinyl chloride emission to the atmosphere determined in accordance with paragraph (e) of 61.68 to be in excess of the applicable emission limits, the owner or operator shall record the identity of the source(s), the date, time, and duration of the excess emission, the cause of the excess emission, and the approximate total vinyl chloride loss during the excess emission, and the method used for determining the vinyl chloride loss. This information shall be retained and made available for inspection by the Administrator as required by §61.71(a). [40 CFR 61.68(f) as referenced by 40 CFR 63.214(a)]
- c. **HAP - LDAR** (40 CFR 63 Subpart UU as referenced by 40 CFR 63, Subpart J)

For emission points subject to 40 CFR 63 Subpart UU: In the event there is a discrepancy between any additional condition related to the VCM MACT and the current Federal Regulation (except for record retention for 5 years), the current Federal Regulation supercedes the additional condition. The owner or operator shall comply with the following:

- i. Monitoring shall comply with Method 21 of 40 CFR part 60, appendix A, except as otherwise provided in 63.1023. (40 CFR 63.1023(b)(1) as referenced by 40 CFR 63.1410)
- ii. Detection instrument performance criteria. (40 CFR 63.1023(b)(2) as referenced by 40 CFR 63.1410)
 - 1) Except as provided for in 63.1023(b)(2)(ii), the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2, paragraph (a) of Method 21 shall be for the representative composition of the process fluid not each individual VOC in the stream. For process streams that contain nitrogen, air, water or other inerts that are not HAP or

VOC, the representative stream response factor shall be determined on an inert-free basis. The response factor may be determined at any concentration for which monitoring for leaks will be conducted. (40 CFR 63.1023(b)(2)(i) as referenced by 40 CFR 63.1410)

- 2) If there is no instrument commercially available that will meet the performance criteria specified in 63.1023(b)(2)(i), the instrument readings may be adjusted by multiplying by the representative response factor of the process fluid, calculated on an inert-free basis as described in 63.1023(b)(2)(i). (40 CFR 63.1023(b)(2)(ii) as referenced by 40 CFR 63.1410)
- iii. Detection instrument calibration procedure. The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A. (40 CFR 63.1023(b)(3) as referenced by 40 CFR 63.1410)
- iv. Detection instrument calibration gas. Calibration gases shall be zero air (less than 10 parts per million of hydrocarbon in air); and the gases specified in 63.1023(b)(4)(i), except as provided in 63.1023(b)(4)(ii). (40 CFR 63.1023(b)(4) as referenced by 40 CFR 63.1410)
 - 1) Mixtures of methane in air at a concentration no more than 2,000 parts per million greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 parts per million above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 parts per million. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring. (40 CFR 63.1023(b)(4)(i) as referenced by 40 CFR 63.1410)
 - 2) A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in 63.1023(b)(2)(i). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air. (40 CFR 63.1023(b)(4)(ii) as referenced by 40 CFR 63.1410)
- v. Monitoring shall be performed when the equipment is in regulated material service or is in use with any other detectable material. (40 CFR 63.1023(b)(5) as referenced by 40 CFR 63.1410)
- vi. Monitoring data obtained prior to the regulated source becoming subject to the referencing subpart that do not meet the criteria specified in 63.1023 (b)(1) through (b)(5) may still be used to qualify initially for less frequent monitoring under the provisions in 40 CFR 63.1025(a)(2), (b)(3) or (b)(4) for valves or 40 CFR 63.1027(b)(3) for connectors provided the departures from the criteria or from the specified monitoring frequency of 40 CFR 63.1025(b)(3) or (b)(4) or 40 CFR 63.1027(b)(3) are minor and do not significantly affect the quality of the data. Examples of minor departures are monitoring at a slightly different frequency (such as every 6 weeks instead of monthly or quarterly), following the performance criteria of section 3.1.2, paragraph (a) of Method 21 of Appendix A of 40 CFR part 60 instead of Additional Condition 2.b.ii., or monitoring using a different leak definition if the data would indicate the presence

- or absence of a leak at the concentration specified in 40 CFR 63 Subpart UU. Failure to use a calibrated instrument is not considered a minor departure. (40 CFR 63.1023(b)(6) as referenced by 40 CFR 63.1410)
- vii. Instrument monitoring using background adjustments. The owner or operator may elect to adjust or not to adjust the instrument readings for background. If an owner or operator elects not to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in 63.1023(b)(1) through (b)(5). In such cases, all instrument readings shall be compared directly to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with 40 CFR 63.1030(b) (pressure relief devices) or 40 CFR 63.1031(f) (alternative compressor standard). If an owner or operator elects to adjust instrument readings for background, the owner or operator shall monitor the equipment according to the procedures specified in 63.1023 (c)(1) through (c)(4). (40 CFR 63.1023(c) as referenced by 40 CFR 63.1410)
- 1) The background level shall be determined, using the procedures in Method 21 of 40 CFR part 60, appendix A. (40 CFR 63.1023(c)(2) as referenced by 40 CFR 63.1410)
 - 2) The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21 of 40 CFR part 60, appendix A. (40 CFR 63.1023(c)(3) as referenced by 40 CFR 63.1410)
 - 3) The arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared to the applicable leak definition for the monitored equipment to determine whether there is a leak or to determine compliance with 40 CFR 63.1030(b) (pressure relief devices) or 40 CFR 63.1031(f) (alternative compressor standard). (40 CFR 63.1023(c)(4) as referenced by 40 CFR 63.1410)
- viii. Sensory monitoring consists of visual, audible, olfactory, or any other detection method used to determine a potential leak to the atmosphere.
- ix. For valves in gas and vapor service and in light liquid service.
- 1) Monitoring method. The valves shall be monitored to detect leaks by the method specified in §63.1023(b) and, as applicable, §63.1023(c). (40 CFR 63.1025(b)(1) as referenced by 63.1410)
 - 2) Monitoring frequency. The owner or operator shall monitor valves for leaks at the intervals specified in 63.1025(b)(3)(i) through 63.1025(b)(3)(v) and shall keep the record specified in 63.1025(b)(3)(vi). (40 CFR 63.1025(b)(3) as referenced by 63.1410)
 - (a) If at least the greater of 2 valves or 2 percent of the valves in a process unit leak, as calculated according to 63.1025(c), the owner or operator shall monitor each valve once per month. (40 CFR 63.1025(b)(3)(i) as referenced by 63.1410)

- (b) At process units with less than the greater of 2 leaking valves or 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in 63.1025(b)(3)(iii) through 63.1025(b)(3)(v). Monitoring data generated before the regulated source became subject to the referencing subpart and meeting the criteria of either §63.1023(b)(1) through (b)(5), or 63.1023(b)(6), may be used to qualify initially for less frequent monitoring under 63.1025(b)(3)(iii) through 63.1025(b)(3)(v) (40 CFR 63.1025(b)(3)(ii) as referenced by 63.1410)
 - (c) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every two quarters (40 CFR 63.1025(b)(3)(iii) as referenced by 63.1410)
 - (d) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every four quarters. (40 CFR 63.1025(b)(3)(iv) as referenced by 63.1410)
 - (e) At process units with less than 0.25 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 years. (40 CFR 63.1025(b)(3)(v) as referenced by 63.1410)
 - (f) The owner or operator shall keep a record of the monitoring schedule for each process unit. (40 CFR 63.1025(b)(3)(vi) as referenced by 63.1410)
- 3) Percent leaking valves calculation.
- (a) The owner or operator shall decide no later than the compliance date of this part or upon revision of an operating permit whether to calculate percent leaking valves on a process unit or group of process units basis. Once the owner or operator has decided, all subsequent percentage calculations shall be made on the same basis and this shall be the basis used for comparison with the subgrouping criteria specified in 63.1025 (b)(4)(i). (40 CFR 63.1025(c)(1)(i) as referenced by 63.1410)
 - (b) The percent leaking valves for each monitoring period for each process unit or valve subgroup shall be calculated using the following equation: [40 CFR 63.1025(c)(1)(ii) as referenced by 63.1410)

$$\%V_L = (V_L/V_T) \times 100$$

where:

- $\%V_L$ = Percent leaking valves.
- V_L = Number of valves found leaking, excluding nonrepairable valves, as provided in 63.1025 (c)(3), and including those valves found leaking pursuant to 63.1025 (d)(2)(iii)(A) and (d)(2)(iii)(B).
- V_T = The sum of the total number of valves monitored.

- (c) Calculation for monitoring frequency. When determining monitoring frequency for each process unit or valve subgroup subject to monthly, quarterly, or semiannual monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last two monitoring periods. When determining monitoring frequency for each process unit or valve subgroup subject to annual or biennial (once every 2 years) monitoring frequencies, the percent leaking valves shall be the arithmetic average of the percent leaking valves from the last three monitoring periods. (40 CFR 63.1025(c)(2) as referenced by 40 CFR 63.1410)
- (d) Nonrepairable valves. (40 CFR 63.1025(c)(3) as referenced by 40 CFR 63.1410)
 - (1) Nonrepairable valves shall be included in the calculation of percent leaking valves the first time the valve is identified as leaking and nonrepairable and as required to comply with 63.1025 (c)(3)(ii). Otherwise, a number of nonrepairable valves (identified and included in the percent leaking valves calculation in a previous period) up to a maximum of 1 percent of the total number of valves in regulated material service at a process unit or affected facility may be excluded from calculation of percent leaking valves for subsequent monitoring periods. (40 CFR 63.1025(c)(3)(i) as referenced by 40 CFR 63.1410)
 - (2) If the number of nonrepairable valves exceeds 1 percent of the total number of valves in regulated material service at a process unit or affected facility, the number of nonrepairable valves exceeding 1 percent of the total number of valves in regulated material service shall be included in the calculation of percent leaking valves. (40 CFR 63.1025(c)(3)(ii) as referenced by 40 CFR 63.1410)
- 4) Leak repair. (40 CFR 63.1025(d) as referenced by 40 CFR 63.1410)
 - (a) If a leak is determined pursuant to §63.1025 (b), (e)(1), or (e)(2), then the leak shall be repaired using the procedures in §63.1024, as applicable. (40 CFR 63.1025(d)(1) as referenced by 40 CFR 63.1410)
 - (b) After a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair. The monitoring required by this paragraph is in addition to the monitoring required to satisfy the definition of repaired and first attempt at repair. (40 CFR 63.1025(d)(2) as referenced by 40 CFR 63.1410)
 - (c) The monitoring shall be conducted as specified in §63.1023(b) and (c) of this section, as appropriate, to determine whether the valve has resumed leaking. (40 CFR 63.1025(d)(2)(i) as referenced by 40 CFR 63.1410)
 - (d) Periodic monitoring required by §63.1023(b) may be used to satisfy the requirements of this paragraph, if the timing of the monitoring period

coincides with the time specified in this paragraph. Alternatively, other monitoring may be performed to satisfy the requirements of this paragraph, regardless of whether the timing of the monitoring period for periodic monitoring coincides with the time specified in this paragraph. (40 CFR 63.1025(d)(2)(ii) as referenced by 40 CFR 63.1410)

- 5) If a leak is detected by monitoring that is conducted pursuant to §63.1025(d), the owner or operator shall follow the provisions of 63.1025(d)(2)(iii)(A) and (d)(2)(iii)(B), to determine whether that valve must be counted as a leaking valve for purposes of 63.1025(c)(1)(ii). (40 CFR 63.1025(d)(2)(iii) as referenced by 40 CFR 63.1410)
 - (a) If the owner or operator elected to use periodic monitoring required by 63.1025 (b) to satisfy the requirements of 63.1025 (d)(2), then the valve shall be counted as a leaking valve. (40 CFR 63.1025(d)(2)(iii)(A) as referenced by 40 CFR 63.1410)
 - (b) If the owner or operator elected to use other monitoring, prior to the periodic monitoring required by §63.1025 (b), to satisfy the requirements of 63.1025 (d)(2), then the valve shall be counted as a leaking valve unless it is repaired and shown by periodic monitoring not to be leaking. (40 CFR 63.1025(d)(2)(iii)(B) as referenced by 40 CFR 63.1410)
 - 6) Special provisions for valves. Unsafe-to-monitor valves. Any valve that is designated, as described in §63.1022(c)(1), as an unsafe-to-monitor valve is exempt from the requirements of §63.1025 paragraphs (b) and (d)(2) and the owner or operator shall monitor the valve according to the written plan specified in §63.1022(c)(4). (40 CFR 63.1025(e)(1) as referenced by 40 CFR 63.1410)
 - 7) Difficult-to-monitor valves. Any valve that is designated, as described in §63.1022(c)(2), as a difficult-to-monitor valve is exempt from the requirements of §63.1025(b) and the owner or operator shall monitor the valve according to the written plan specified in §63.1022(c)(4). (40 CFR 63.1025(e)(2) as referenced by 40 CFR 63.1410)
- x. For pumps in light liquid service.
- 1) The pumps shall be monitored monthly to detect leaks by the method specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c). (40 CFR 63.1026(b)(1) as referenced by 40 CFR 63.1410)
 - 2) Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The owner or operator shall document that the inspection was conducted and the date of the inspection. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either 63.1026 (b)(4)(i) or (b)(4)(ii). (40 CFR 63.1026(b)(4) as referenced by 40 CFR 63.1410)
 - (a) The owner or operator shall monitor the pump as specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c). If the instrument reading indicates a leak

as specified in 63.1026 (b)(2), a leak is detected and it shall be repaired using the procedures in 40 CFR 63.1024, except as specified in 40 CFR 63.1026(b)(3); or (40 CFR 63.1026(b)(4)(i) as referenced by 40 CFR 63.1410)

- (b) The owner or operator shall eliminate the visual indications of liquids dripping. (40 CFR 63.1026(b)(4)(ii) as referenced by 40 CFR 63.1410)
- 3) Percent leaking pumps calculation. (40 CFR 63.1026(c) as referenced by 40 CFR 63.1410)
 - (a) The owner or operator shall decide no later than the compliance date of this part or upon revision of an operating permit whether to calculate percent leaking pumps on a process unit basis or group of process units basis. Once the owner or operator has decided, all subsequent percentage calculations shall be made on the same basis. (40 CFR 63.1026(c)(1) as referenced by 40 CFR 63.1410)
 - (b) If, when calculated on a 6-month rolling average, at least the greater of either 10 percent of the pumps in a process unit or three pumps in a process unit leak, the owner or operator shall implement a quality improvement program for pumps that complies with the requirements of 40 CFR 63.1035. (40 CFR 63.1026(c)(2) as referenced by 40 CFR 63.1410)
 - (c) The number of pumps at a process unit or affected facility shall be the sum of all the pumps in regulated material service, except that pumps found leaking in a continuous process unit or affected facility within 1 month after start-up of the pump shall not count in the percent leaking pumps calculation for that one monitoring period only. (40 CFR 63.1026(c)(3) as referenced by 40 CFR 63.1410)
 - (d) Percent leaking pumps shall be determined by the following equation: (40 CFR 63.1026(c)(4) as referenced by 40 CFR 63.1410)

$$\%P_L = \left(\frac{(P_L - P_S)}{(P_T - P_S)} \right) \times 100$$

Where:

- $\%P_L$ = Percent leaking pumps
- P_L = Number of pumps found leaking as determined through monthly monitoring as required in 63.1026 (b). Do not include results from inspection of unsafe-to-monitor pumps pursuant to 40 CFR 63.1026(e)(6).
- P_S = Number of pumps leaking within 1 month of start-up during the current monitoring period.
- P_T = Total pumps in regulated material service, including those meeting the criteria in paragraphs (e)(1), (e)(2), (e)(3), and (e)(6) of 63.1026.

- 4) If a leak is detected pursuant to 63.1026 (b), then the leak shall be repaired using the procedures in 40 CFR 63.1024, as applicable, unless otherwise specified in 40 CFR 63.1026(b)(5) for leaks identified by visual indications of liquids dripping. (40 CFR 63.1026(d) as referenced by 40 CFR 63.1410)
- 5) Special provisions for pumps. (40 CFR 63.1026(e) as referenced by 40 CFR 63.1410)
 - (a) Dual mechanical seal pumps. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.1026(b), provided the requirements specified in 40 CFR 63(e)(1)(i) through (e)(1)(viii) are met. (40 CFR 63.1026(e)(1) as referenced by 40 CFR 63.1410)
 - (1) The owner or operator determines, based on design considerations and operating experience, criteria applicable to the presence and frequency of drips and to the sensor that indicates failure of the seal system, the barrier fluid system, or both. The owner or operator shall keep records at the plant of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. This record must be available for review by an inspector. (40 CFR 63.1026(e)(1)(i) as referenced by 40 CFR 63.1410)
 - (2) Each dual mechanical seal system shall meet the requirements specified in 40 CFR 63.1026(e)(1)(ii)(A), (e)(1)(ii)(B), or (e)(1)(ii)(C). (40 CFR 63.1026(e)(1)(ii) as referenced by 40 CFR 63.1410)
 - (i) Each dual mechanical seal system is operated with the barrier fluid at a pressure that is at all times (except periods of startup, shutdown, or malfunction) greater than the pump stuffing box pressure; or (40 CFR 63.1026(e)(1)(ii)(A) as referenced by 40 CFR 63.1410)
 - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that complies with the requirements of either 40 CFR 63.1034 or 40 CFR 63.1021(b); or (40 CFR 63.1026(e)(1)(ii)(B) as referenced by 40 CFR 63.1410)
 - (iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream. (40 CFR 63.1026(e)(1)(ii)(C) as referenced by 40 CFR 63.1410)
 - (3) The barrier fluid is not in light liquid service. (40 CFR 63.1026(e)(1)(iii) as referenced by 40 CFR 63.1410)
 - (4) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (40 CFR 63.1026(e)(1)(iv) as referenced by 40 CFR 63.1410)

- (5) Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The owner or operator shall document that the inspection was conducted and the date of the inspection. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in 40 CFR 63.1026(e)(1)(v)(A) or (e)(1)(v)(B) prior to the next required inspection. (40 CFR 63.1026(e)(1)(v) as referenced by 40 CFR 63.1410)
 - (i) The owner or operator shall monitor the pump as specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), to determine if there is a leak of regulated material in the barrier fluid. If an instrument reading of 1,000 parts per million or greater is measured, a leak is detected and it shall be repaired using the procedures in 40 CFR 63.1024; or (40 CFR 63.1026(e)(1)(v)(A) as referenced by 40 CFR 63.1410)
 - (ii) The owner or operator shall eliminate the visual indications of liquids dripping. (40 CFR 63.1026(e)(1)(v)(B) as referenced by 40 CFR 63.1410)
- (6) If indications of liquids dripping from the pump seal exceed the criteria established in 40 CFR 63.1026(e)(1)(i), or if based on the criteria established in 40 CFR 63.1026(e)(1)(i) the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected. (40 CFR 63.1026(e)(1)(vi) as referenced by 40 CFR 63.1410)
- (7) Each sensor as described in 40 CFR 63.1026(e)(1)(iv) is observed daily or is equipped with an alarm unless the pump is located within the boundary of an unmanned plant site. (40 CFR 63.1026(e)(1)(vii) as referenced by 40 CFR 63.1410)
- (8) When a leak is detected pursuant to 40 CFR 63.1026(e)(1)(vi), it shall be repaired as specified in 40 CFR 63.1024. (40 CFR 63.1026(e)(1)(viii) as referenced by 40 CFR 63.1410)
- (b) No external shaft. Any pump that is designed with no externally actuated shaft penetrating the pump housing is exempt from the requirements of 40 CFR 63.1026(b). (40 CFR 63.1026(e)(2) as referenced by 40 CFR 63.1410)
- (c) Routed to a process or fuel gas system or equipped with a closed vent system. Any pump that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage from the pump to a control device meeting the requirements of 40 CFR 63.1034 of this part or 40 CFR 63.1021(b) is exempt from the requirements of 40 CFR 63.1026(b). (40 CFR 63.1026(e)(3) as referenced by 40 CFR 63.1410)

- (d) 90 percent exemption. If more than 90 percent of the pumps at a process unit or affected facility meet the criteria in either 40 CFR 63.1026(e)(1) or (e)(2), the process unit or affected facility is exempt from the percent leaking calculation in 40 CFR 63.1026(c). (40 CFR 63.1026(e)(5) as referenced by 40 CFR 63.1410)
 - (e) Unsafe-to-monitor pumps. Any pump that is designated, as described in 40 CFR 63.1022(c)(1), as an unsafe-to-monitor pump is exempt from the requirements of 40 CFR 63.1026(b), the monitoring and inspection requirements of 40 CFR 63.1026(e)(1)(v) through (viii), and the owner or operator shall monitor and inspect the pump according to the written plan specified in 40 CFR 63.1022(c)(4). (40 CFR 63.1026(e)(6) as referenced by 40 CFR 63.1410)
- xi. For connectors in gas and vapor service and in light liquid service.
- 1) Monitoring method. The connectors shall be monitored to detect leaks by the method specified in §63.1023(b) and, as applicable, §63.1023(c). (40 CFR 63.1027(b)(1))
 - 2) Monitoring periods. The owner or operator shall perform monitoring, subsequent to the initial monitoring required in 40 CFR 63.1027(a), as specified in 63.1027 (b)(3)(i) through (b)(3)(iii), and shall comply with the requirements of 63.1027 (b)(3)(iv) and (b)(3)(v). The required period in which monitoring must be conducted shall be determined from 63.1027 (b)(3)(i) through (b)(3)(iii) using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in 63.1027 (c). (40 CFR 63.1027(b)(3) as referenced by 40 CFR 63.1410)
 - (a) If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year). (40 CFR 63.1027(b)(3)(i) as referenced by 40 CFR 63.1410)
 - (b) If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4 year monitoring period. (40 CFR 63.1027(b)(3)(ii) as referenced by 40 CFR 63.1410)
 - (c) If the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in 40 CFR 63.1027(b)(3)(iii)(A) and either 40 CFR 63.1027(b)(3)(iii)(B) or (b)(3)(iii)(C), as appropriate. (40 CFR 63.1027(b)(3)(iii) as referenced by 40 CFR 63.1410)
 - (1) An owner or operator shall monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period. (40 CFR 63.1027(b)(3)(iii)(A) as referenced by 40 CFR 63.1410)
 - (2) If the percent leaking connectors calculated from the monitoring results in 40 CFR 63.1027(b)(3)(iii)(A) is greater than or equal to 0.35 percent of the

monitored connectors, the owner or operator shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period shall be started pursuant to 40 CFR 63.1027(b)(3)(iii)(A), based on the percent leaking connectors of the total monitored connectors. (40 CFR 63.1027(b)(3)(iii)(B) as referenced by 40 CFR 63.1410)

- (3) If the percent leaking connectors calculated from the monitoring results in 40 CFR 63.1027(b)(3)(iii)(A) is less than 0.35 percent of the monitored connectors, the owner or operator shall monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period. (40 CFR 63.1027(b)(3)(iii)(c) as referenced by 40 CFR 63.1410)
- (d) If, during the monitoring conducted pursuant to 40 CFR 63.1027(b)(3)(i) through (b)(3)(iii), a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking. (40 CFR 63.1027(b)(3)(iv) as referenced by 40 CFR 63.1410)
- (e) The owner or operator shall keep a record of the start date and end date of each monitoring period under this section for each process unit. (40 CFR 63.1027(b)(3)(v) as referenced by 40 CFR 63.1410)
- 3) Percent leaking connectors calculation. For use in determining the monitoring frequency, as specified in 40 CFR 63.1027(a) and (b)(3), the percent leaking connectors as used in 40 CFR 63.1027(a) and (b)(3) shall be calculated by using equation number 4. (40 CFR 63.1027(c))

$$\%C_L = C_L / C_t \times 100$$

Where:

- $\%C_L$ = Percent leaking connectors as determined through periodic monitoring required in 40 CFR 63.1027(a) and (b)(3)(i) through (b)(3)(iii).
- C_L = Number of connectors measured at 500 parts per million or greater, by the method specified in §63.1023(b).
- C_t = Total number of monitored connectors in the process unit or affected facility.

- 4) Leak repair. If a leak is detected pursuant to 40 CFR 63.1027(a) and (b), then the leak shall be repaired using the procedures in §63.1024, as applicable. (40 CFR 63.1027(d) as referenced by 63.1410)
- 5) Special provisions for connectors. (40 CFR 63.1027(e))
 - (a) Unsafe-to-monitor connectors. Any connector that is designated, as described in §63.1022(c)(1), as an unsafe-to-monitor connector is exempt from the requirements

of 40 CFR 63.1027(a) and (b) and the owner or operator shall monitor according to the written plan specified in §63.1022(c)(4). (40 CFR 63.1027(e)(1) as referenced by 63.1410)

- (b) Inaccessible, ceramic, or ceramic-lined connectors. (40 CFR 63.1027(e)(2))
 - (1) Any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of 40 CFR 63.1027(a) and (b), from the leak repair requirements of 40 CFR 63.1027(d), and from the record keeping and reporting requirements of §§63.1038 and 63.1039. An inaccessible connector is one that meets any of the provisions specified in 40 CFR 63.1027(e)(2)(i)(A) through (e)(2)(i)(F), as applicable. (40 CFR 63.1027(e)(2)(i) as referenced by 40 CFR 63.1410)
 - (i) Buried; (40 CFR 63.1027(e)(2)(i)(A) as referenced by 40 CFR 63.1410)
 - (ii) Insulated in a manner that prevents access to the connector by a monitor probe; (40 CFR 63.1027(e)(2)(i)(B) as referenced by 40 CFR 63.1410)
 - (iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe; (40 CFR 63.1027(e)(2)(i)(c) as referenced by 40 CFR 63.1410)
 - (iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground. (40 CFR 63.1027(e)(2)(i)(D) as referenced by 40 CFR 63.1410)
 - (v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; (40 CFR 63.1027(e)(2)(i)(E) as referenced by 40 CFR 63.1410)
 - (vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment. (40 CFR 63.1027(e)(2)(i)(F) as referenced by 40 CFR 63.1410)
 - (2) If any inaccessible, ceramic or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical. (40 CFR 63.1027(e)(2)(ii) as referenced by 40 CFR 63.1410)

xii. For agitators in gas/vapor and light liquid service.

- 1) Each agitator seal shall be monitored monthly to detect leaks by the methods specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), except as provided in 40 CFR 63.1021(b), 40 CFR 63.1036, 40 CFR 63.1037, or 40 CFR 63.1028(e). (40 CFR 63.1028(c)(1) as referenced by 40 CFR 63.1410)
- 2) Visual inspection. (40 CFR 63.1028(c)(3) as referenced by 40 CFR 63.1410)
 - (a) Each agitator seal shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. The owner or operator shall document that the inspection was conducted and the date of the inspection. (40 CFR 63.1028(c)(3)(i) as referenced by 40 CFR 63.1410)
 - (b) If there are indications of liquids dripping from the agitator seal, the owner or operator shall follow the procedures specified in 40 CFR 63.1028(c)(3)(ii)(A) or (c)(3)(ii)(B) prior to the next required inspection. (40 CFR 63.1028(c)(3)(ii) as referenced by 40 CFR 63.1410)
 - (1) The owner or operator shall monitor the agitator seal as specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), to determine if there is a leak of regulated material. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected, and it shall be repaired according to 40 CFR 63.1028(d); or (40 CFR 63.1028(c)(3)(ii)(A) as referenced by 40 CFR 63.1410)
 - (2) The owner or operator shall eliminate the indications of liquids dripping from the agitator seal. (40 CFR 63.1028(c)(3)(ii)(B) as referenced by 40 CFR 63.1410)
- 3) Special provisions for agitators. (40 CFR 63.1028(e) as referenced by 40 CFR 63.1410)
 - (a) Dual mechanical seal. Each agitator equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR 63.1028(c), provided the requirements specified in 40 CFR 63.1028(e)(1)(i) through (e)(1)(vi) are met. (40 CFR 63.1028(e)(1) as referenced by 40 CFR 63.1410)
 - (1) Each dual mechanical seal system shall meet the applicable requirements specified in 40 CFR 63.1028(e)(1)(i)(A), (e)(1)(i)(B), or (e)(1)(i)(C). (40 CFR 63.1028(e)(1)(i) as referenced by 40 CFR 63.1410)
 - (i) Operated with the barrier fluid at a pressure that is at all times (except during periods of startup, shutdown, or malfunction) greater than the agitator stuffing box pressure; or (40 CFR 63.1028(e)(1)(i)(A) as referenced by 40 CFR 63.1410)
 - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a

control device that meets the requirements of either 40 CFR 63.1034 or 40 CFR 63.1021(b); or (40 CFR 63.1028(e)(1)(i)(B) as referenced by 40 CFR 63.1410)

- (iii) Equipped with a closed-loop system that purges the barrier fluid into a process stream. (40 CFR 63.1028(e)(1)(i)(C) as referenced by 40 CFR 63.1410)
- (2) The barrier fluid is not in light liquid service. (40 CFR 63.1028(e)(1)(ii) as referenced by 40 CFR 63.1410)
- (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both. (40 CFR 63.1028(e)(1)(iii) as referenced by 40 CFR 63.1410)
- (4) Each agitator seal is checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. If there are indications of liquids dripping from the agitator seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in 40 CFR 63.1028(e)(1)(iv)(A) or (e)(1)(iv)(B) prior to the next required inspection. (40 CFR 63.1028(e)(1)(iv) as referenced by 40 CFR 63.1410)
 - (i) The owner or operator shall monitor the agitator seal as specified in 40 CFR 63.1023(b) and, as applicable, 40 CFR 63.1023(c), to determine the presence of regulated material in the barrier fluid. If an instrument reading equivalent to or greater than 10,000 ppm is measured, a leak is detected and it shall be repaired using the procedures in 40 CFR 63.1024, or (40 CFR 63.1028(e)(1)(iv)(A) as referenced by 40 CFR 63.1410)
 - (ii) The owner or operator shall eliminate the visual indications of liquids dripping. (40 CFR 63.1028(e)(1)(iv)(B) as referenced by 40 CFR 63.1410)
- (5) Each sensor as described in 40 CFR 63.1028(e)(1)(iii) is observed daily or is equipped with an alarm unless the agitator seal is located within the boundary of an unmanned plant site. (40 CFR 63.1028(e)(1)(v) as referenced by 40 CFR 63.1410)
- (6) The owner or operator of each dual mechanical seal system shall meet the requirements specified in 40 CFR 63.1028(e)(1)(vi)(A) and (e)(1)(vi)(B). (40 CFR 63.1028(e)(1)(vi) as referenced by 40 CFR 63.1410)
 - (i) The owner or operator shall determine, based on design considerations and operating experience, criteria that indicates failure of the seal system, the barrier fluid system, or both and applicable to the presence and frequency of drips. If indications of liquids dripping from the

agitator seal exceed the criteria, or if, based on the criteria the sensor indicates failure of the seal system, the barrier fluid system, or both, a leak is detected and shall be repaired pursuant to 40 CFR 63.1024, as applicable. (40 CFR 63.1028(e)(1)(vi)(A) as referenced by 40 CFR 63.1410)

- (ii) The owner or operator shall keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. (40 CFR 63.1028(e)(1)(vi)(B) as referenced by 40 CFR 63.1410)
 - (b) No external shaft. Any agitator that is designed with no externally actuated shaft penetrating the agitator housing is exempt from 40 CFR 63.1028(c). (40 CFR 63.1028(e)(2) as referenced by 40 CFR 63.1410)
 - (c) Routed to a process or fuel gas system or equipped with a closed vent system. Any agitator that is routed to a process or fuel gas system that captures and transports leakage from the agitator to a control device meeting the requirements of either 40 CFR 63.1034 or 40 CFR 63.1021(b) is exempt from the requirements of 40 CFR 63.1028(c). (40 CFR 63.1028(e)(3) as referenced by 40 CFR 63.1410)
 - (d) Difficult-to-monitor agitator seals. Any agitator seal that is designated, as described in 40 CFR 63.1022(c)(2), as a difficult-to-monitor agitator seal is exempt from the requirements of 40 CFR 63.1028(c) and the owner or operator shall monitor the agitator seal according to the written plan specified in 40 CFR 63.1022(c)(4). (40 CFR 63.1028(e)(5) as referenced by 40 CFR 63.1410)
 - (e) Equipment obstructions. Any agitator seal that is obstructed by equipment or piping that prevents access to the agitator by a monitor probe is exempt from the monitoring requirements of 40 CFR 63.1028(c). (40 CFR 63.1028(e)(6) as referenced by 40 CFR 63.1410)
 - (f) Unsafe-to-monitor agitator seals. Any agitator seal that is designated, as described in 40 CFR 63.1022(c)(1), as an unsafe-to-monitor agitator seal is exempt from the requirements of 40 CFR 63.1028(c) and the owner or operator of the agitator seal monitors the agitator seal according to the written plan specified in 40 CFR 63.1022(c)(4). (40 CFR 63.1028(e)(7) as referenced by 40 CFR 63.1410)
- xiii. Pumps, valves, connectors, and agitators in heavy liquid service; Pressure relief devices in liquid service:
- 1) Monitoring method. Unless otherwise specified in §63.1021(b), §63.1036, or §63.1037, the owner or operator shall comply with 40 CFR 63.1029(b)(1) and (b)(2). Pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in light liquid or heavy liquid service; and instrumentation systems shall be monitored within 5 calendar days by the method specified in §63.1023(b) and, as applicable, §63.1023(c), if evidence of a potential leak to the atmosphere is found by visual, audible, olfactory,

or any other detection method, unless the potential leak is repaired as required in 63.1029(c). (40 CFR 63.1029(b)(1) as referenced by 63.1410)

- 2) Leak repair. For equipment identified in 40 CFR 63.1029(b) that is not monitored by the method specified in §63.1023(b) and, as applicable, §63.1023(c), repaired shall mean that the visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure. (40 CFR 63.1029(c) as referenced by 63.1410)

xiv. For pressure relief devices in gas and vapor service.

- 1) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release, except as provided in §63.1024(d). (40 CFR 63.1030(c)(1) as referenced by 63.1410)
- 2) The pressure relief device shall be monitored no later than five calendar days after the pressure to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in §63.1023(b) and, as applicable, §63.1023(c). (40 CFR 63.1030(c)(2) as referenced by 63.1410)
- 3) The owner or operator shall record the dates and results of the monitoring required by 63.1030(c)(2) following a pressure release including the background level measured and the maximum instrument reading measured during the monitoring. (40 CFR 63.1030(c)(3) as referenced by 63.1410)

d. **HAP (Non-VCM)**

See Comments 6 and 10.

e. **TAP**

- i. The owner or operator shall demonstrate continued compliance with Regulation 5.11 as follows: (See Comment 9)
 - 1) The owner or operator shall maintain a Management of Change System (MOCS), as approved by the District, to evaluate and document modifications, as defined in Regulation 5.12.
 - 2) If a control device is required for compliance with Regulation 5.11, the owner or operator shall maintain a PMP as described in Additional Condition 2.e.iii.
 - 3) The owner or operator shall exempt from Regulation 5.11 for each specific hazardous air pollutant (HAP) governed by a 40 CFR Part 63 MACT Standard that is or becomes applicable.

- ii. The owner or operator shall demonstrate continued compliance with Regulation 5.12 as follows: (See Comment 9)
 - 1) The owner or operator shall conduct a compliance or ASL determination for each Regulation 5.12 pollutant or emission source, and for each modification, as defined in Regulation 5.12.
 - 2) The owner or operator shall submit, if required, a BACT demonstration for each Regulation 5.12 TAP emission to the District.
 - 3) The owner or operator shall maintain a MOCS, as approved by the District, to evaluate and document modifications, as defined in Regulation 5.12.
 - 4) If a control device is required for compliance with Regulation 5.12, the owner or operator shall maintain a PMP as described in Additional Condition 2.e.iii.
 - 5) The owner or operator is exempt from Regulation 5.12 for each specific hazardous air pollutant (HAP) governed by a 40 CFR Part 63 MACT Standard that is or becomes applicable.
- iii. The owner or operator shall implement a PMP for the control devices required for compliance with Regulation 5.11 or 5.12 as prescribed in Appendix A. The owner or operator shall:
 - 1) Perform or cause to be performed preventive maintenance on control devices according to the PMP; and
 - 2) Maintain records of the PMP and preventive maintenance performed.
 - 3) If a non-compliance occurs, the PMP shall be modified to adequately address the deficiency.
- iv. The owner or operator shall monitor the pH of the caustic scrubber (C-LTX-TK-SCR-1) effluent at least daily to confirm proper neutralization of hydrogen chloride/hydrochloric acid emissions from the FTO (C-LTX-TK-FTO-1). Records of this monitoring shall be maintained and be made available for review by the District upon request. (See Comment 9)

3. **Record keeping** (Regulation 2.16, section 4.1.9.2)

a. **VOC**

- i. For Emission Points subject to Regulations 6.13 and 7.12, there are no record keeping requirements for this pollutant.
- ii. For Emission Points subject to Regulation 6.24:

And 40 CFR Part 63, Subpart J: The record keeping requirements contained in 40 CFR Part 63, Subpart J are sufficient to demonstrate continued compliance with Regulation 6.24.

- iii. For Emission Points subject to Regulation 7.25:

And 40 CFR Part 63, Subpart J: The record keeping requirements contained in 40 CFR Part 63, Subpart J are sufficient to demonstrate continued compliance with Regulation 7.25.

- b. **HAP - Non LDAR** (40 CFR 61 Subpart F as referenced by 40 CFR 63 Subpart J)

In the event there is a discrepancy between any permit term or condition related to a Part 61 or Part 63 applicable requirement and the current Federal Regulation (except for record retention for 5 years), the current Federal Regulation supercedes the additional condition.

The owner or operator shall retain the following information and make it available to the Administrator:

- i. A record of the leaks detected by the vinyl chloride monitoring system as required by 61.65(b)(8), including the concentrations of vinyl chloride measured, analyzed, and recorded by the vinyl chloride detector, the location of each measurement, and the date and approximate time of each measurement. [40 CFR 61.71(a)(1) as referenced by 40 CFR 63.214(a)]
- ii. A record of the leaks detected during routine monitoring with the portable hydrocarbon detector and the action taken to repair the leaks, as required by 61.65(b)(8), including a brief statement explaining the location and cause of each leak detected with the portable hydrocarbon detector, the date and time of the leak, and any action taken to eliminate the leak. [40 CFR 61.71(a)(2) as referenced by 40 CFR 63.214(a)]
- iii. A record of the emissions measured in accordance with 61.68. [40 CFR 61.71(a)(3) as referenced by 40 CFR 63.214(a)]
- iv. A daily operating record for each polyvinyl chloride reactor, including pressures and temperatures. [40 CFR 61.71(a)(4) as referenced by 40 CFR 63.214(a)]

- c. **HAP - LDAR** (40 CFR 63 Subpart UU as referenced by 40 CFR Part 63 Subpart J)

- i. When each leak is detected pursuant to the monitoring specified in 40 CFR 63.1023(a), a weatherproof and readily visible identification, shall be attached to the leaking equipment. (40 CFR 63.1023(e)(1) as referenced by 40 CFR 63.1410)
- ii. When each leak is detected, the information specified in 40 CFR 63.1024(f) shall be recorded and kept pursuant to the referencing subpart, except for the information for connectors complying with the 8 year monitoring period allowed under 40 CFR 63.1027(b)(3)(iii) shall be kept 5 years beyond the date of its last use. (40 CFR 63.1023(e)(2) as referenced by 40 CFR 63.1410)
- iii. Leak repair records. For each leak detected, the information specified in 40 CFR 63.1024(f)(1) through (f)(5) shall be recorded and maintained pursuant to the referencing subpart. (40 CFR 63.1024(f) as referenced by 40 CFR 63.1410)

- 1) The date of first attempt to repair the leak. (40 CFR 63.1024(f) as referenced by 40 CFR 63.1410)
 - 2) The date of successful repair of the leak. (40 CFR 63.1024(f)(2) as referenced by 40 CFR 63.1410)
 - 3) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A at the time the leak is successfully repaired or determined to be nonrepairable. (40 CFR 63.1024(f)(3) as referenced by 40 CFR 63.1410)
 - 4) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak as specified in 40 CFR 63.1024(f)(4)(i) and (f)(4)(ii). (40 CFR 63.1024(f)(4) as referenced by 40 CFR 63.1410)
 - (a) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup, shutdown, and malfunction plan, as required by the referencing subpart for the source, or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure. (40 CFR 63.1024(f)(4)(i) as referenced by 40 CFR 63.1410)
 - (b) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion. (40 CFR 63.1024(f)(4)(ii) as referenced by 40 CFR 63.1410)
 - 5) Dates of process unit or affected facility shutdowns that occur while the equipment is unrepaired. (40 CFR 63.1024(f)(5) as referenced by 40 CFR 63.1410)
- iv. For valves in light liquid or vapor service, the owner or operator shall keep a record of the monitoring schedule for each process unit. (40 CFR 63.1025(b)(3)(vi) as referenced by 40 CFR 63.1410)
- v. Failure criterion and leak detection. (40 CFR 63.1031(d) as referenced by 40 CFR 63.1410)
- 1) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected and shall be repaired pursuant to §63.1024, as applicable. (40 CFR 63.1031(d)(1) as referenced by 40 CFR 63.1410)
 - 2) The owner or operator shall keep records of the design criteria and an explanation of the design criteria; and any changes to these criteria and the reasons for the changes. (40 CFR 63.1031(d)(2) as referenced by 40 CFR 63.1410)

- vi. The owner or operator shall maintain records specified in 40 CFR 63.1025(b)(4)(iv)(A) through (b)(4)(iv)(D). (40 CFR 63.1025(b)(4)(iv) as referenced by 40 CFR 63.1410)
 - 1) Which valves are assigned to each subgroup, (40 CFR 63.1025(b)(4)(iv)(A) as referenced by 40 CFR 63.1410)
 - 2) Monitoring results and calculations made for each subgroup for each monitoring period, (40 CFR 63.1025(b)(4)(iv)(B) as referenced by 40 CFR 63.1410)
 - 3) Which valves are reassigned, the last monitoring result prior to reassignment, and when they were reassigned, and (40 CFR 63.1025(b)(4)(iv)(C) as referenced by 40 CFR 63.1410)
 - 4) The results of the semiannual overall performance calculation required in 40 CFR 63.1025(b)(4)(iii). (40 CFR 63.1025(b)(4)(iv)(D) as referenced by 40 CFR 63.1410)
- vii. General equipment leak records. (40 CFR 63.1038(b) as referenced by 40 CFR 63.1410)
 - 1) As specified in §63.1022(a) and (b), the owner or operator shall keep general and specific equipment identification if the equipment is not physically tagged and the owner or operator is electing to identify the equipment subject to this subpart through written documentation such as a log or other designation. (40 CFR 63.1038(b)(1) as referenced by 40 CFR 63.1410)
 - 2) The owner or operator shall keep a written plan as specified in §63.1022(c)(4) for any equipment that is designated as unsafe- or difficult-to-monitor. (40 CFR 63.1038(b)(2) as referenced by 40 CFR 63.1410)
 - 3) The owner or operator shall maintain a record of the identity and an explanation as specified in §63.1022(d)(2) for any equipment that is designated as unsafe-to-repair. (40 CFR 63.1038(b)(3) as referenced by 40 CFR 63.1410)
 - 4) As specified in §63.1022(e), the owner or operator shall maintain the identity of compressors operating with an instrument reading of less than 500 parts per million. (40 CFR 63.1038(b)(4) as referenced by 40 CFR 63.1410)
 - 5) The owner or operator shall keep records associated with the determination that equipment is in heavy liquid service as specified in §63.1022(f). (40 CFR 63.1038(b)(5) as referenced by 40 CFR 63.1410)
 - 6) The owner or operator shall keep records for leaking equipment as specified in §63.1023(e)(2). (40 CFR 63.1038(b)(6) as referenced by 40 CFR 63.1410)
 - 7) The owner or operator shall keep records for leak repair as specified in §63.1024(f) and records for delay of repair as specified in §63.1024(d). (40 CFR 63.1038(b)(7) as referenced by 40 CFR 63.1410)

viii. Specific equipment leak records. (40 CFR 63.1038(c) as referenced by 40 CFR 63.1410)

- 1) For valves, the owner or operator shall maintain the records specified in 63.1038 (c)(1)(i) and (c)(1)(ii). (40 CFR 63.1038(c)(1) as referenced by 40 CFR 63.1410)
 - (a) The monitoring schedule for each process unit as specified in §63.1025(b)(3)(vi). (40 CFR 63.1038(c)(1)(i) as referenced by 40 CFR 63.1410)
 - (b) The valve subgrouping records specified in §63.1025(b)(4) (iv), if applicable. (40 CFR 63.1038(c)(1)(ii) as referenced by 40 CFR 63.1410)
- 2) For pumps, the owner or operator shall maintain the records specified in 40 CFR 63.1038(c)(2)(i) through (c)(2)(iii). (40 CFR 63.1038(c)(2) as referenced by 40 CFR 63.1410)
 - (a) Documentation of pump visual inspections as specified in 40 CFR 63.1026(b)(4). (40 CFR 63.1038(c)(2)(i) as referenced by 40 CFR 63.1410)
 - (b) Documentation of dual mechanical seal pump visual inspections as specified in 40 CFR 63.1026(e)(1)(v). (40 CFR 63.1038(c)(2)(ii) as referenced by 40 CFR 63.1410)
 - (c) For the criteria as to the presence and frequency of drips for dual mechanical seal pumps, records of the design criteria and explanations and any changes and the reason for the changes, as specified in 40 CFR 63.1026(e)(1)(i). (40 CFR 63.1038(c)(2)(iii) as referenced by 40 CFR 63.1410)
- 3) For connectors, the owner or operator shall maintain the monitoring schedule for each process unit as specified in 40 CFR 63.1027(b)(3)(v). (40 CFR 63.1038(c)(3) as referenced by 40 CFR 63.1410)
- 4) For agitators, the owner or operator shall maintain the following records: (40 CFR 63.1038(c)(4) as referenced by 40 CFR 63.1410)
 - (a) Documentation of agitator seal visual inspections as specified in 40 CFR 63.1028; and (40 CFR 63.1038(c)(4)(i) as referenced by 40 CFR 63.1410)
 - (b) For the criteria as to the presence and frequency of drips for agitators, the owner or operator shall keep records of the design criteria and explanations and any changes and the reason for the changes, as specified in 40 CFR 63.1028(e)(1)(vi). (40 CFR 63.1038(c)(4)(ii) as referenced by 40 CFR 63.1410)
- 5) For pressure relief devices in gas and vapor or light liquid service, the owner or operator shall keep records of the dates and results of monitoring following a pressure release, as specified in 40 CFR 63.1030(c)(3). (40 CFR 63.1038(c)(5) as referenced by 40 CFR 63.1410)

- 6) For compressors, the owner or operator shall maintain the records specified in 40 CFR 63.1038(c)(6)(i) and (c)(6)(ii). (40 CFR 63.1038(c)(6) as referenced by 40 CFR 63.1410)
 - (a) For criteria as to failure of the seal system and/or the barrier fluid system, record the design criteria and explanations and any changes and the reason for the changes, as specified in 40 CFR 63.1031(d)(2). (40 CFR 63.1038(c)(6)(i) as referenced by 40 CFR 63.1410)
 - (b) For compressors operating under the alternative compressor standard, record the dates and results of each compliance test as specified in 40 CFR 63.1031(f)(2). (40 CFR 63.1038(c)(6)(ii) as referenced by 40 CFR 63.1410)
- 7) For a pump QIP program, the owner or operator shall maintain the records specified in 40 CFR 63.1038(c)(7)(i) through (c)(7)(v). (40 CFR 63.1038(c)(7) as referenced by 40 CFR 63.1410)
 - (a) Individual pump records as specified in 40 CFR 63.1035(d)(2). (40 CFR 63.1038(c)(7)(i) as referenced by 40 CFR 63.1410)
 - (b) Trial evaluation program documentation as specified in 40 CFR 63.1035(d)(6)(iii). (40 CFR 63.1038(c)(7)(ii) as referenced by 40 CFR 63.1410)
 - (c) Engineering evaluation documenting the basis for judgement that superior emission performance technology is not applicable as specified in 40 CFR 63.1035(d)(6)(vi). (40 CFR 63.1038(c)(7)(iii) as referenced by 40 CFR 63.1410)
 - (d) Quality assurance program documentation as specified in 40 CFR 63.1035(d)(7). (40 CFR 63.1038(c)(7)(iv) as referenced by 40 CFR 63.1410)
 - (e) QIP records as specified in 40 CFR 63.1035(e). (40 CFR 63.1038(c)(7)(v) as referenced by 40 CFR 63.1410)

d. **HAP (Non-VCN)**

See Comments 6 & 10.

e. **TAP**

The owner or operator shall maintain records as specified in the District approved MOCS. These records shall be made available to the District upon request.

4. **Reporting (Regulation 2.16, section 4.1.9.3)**

a. **VOC**

- i. For Emission Points subject to Regulations 6.13 and 7.12, there are no compliance reporting requirements.
- ii. For Emission Points subject to Regulation 6.24:

And 40 CFR Part 63, Subpart J: The reporting requirements specified in 40 CFR Part 63, Subpart J are sufficient to demonstrate continued compliance with Regulation 6.24.

- iii. For Emission Points subject to Regulation 7.25:

And 40 CFR Part 63, Subpart J: The reporting requirements specified in 40 CFR Part 63, Subpart J are sufficient to demonstrate continued compliance with Regulation 7.25.

b. **HAP - Non LDAR** (40 CFR 61 Subpart F as referenced by 40 CFR Part 63 Subpart J)

For emission points subject to 40 CFR 61 Subpart J: In the event there is a discrepancy between any permit term or condition related to a Part 61 or Part 63 applicable requirement and the current Federal Regulation (except for record retention for 5 years), the current Federal Regulation supercedes the additional condition. Report the following on a **quarterly basis** instead of semi-annually:

- i. The owner or operator of any source to which this subpart applies shall submit to the Administrator on March 15, June 15, September 15, and December 15 of each year a report in writing containing the information required by this section. The first report is to be submitted following the first full 3-month reporting period after the initial report is submitted. [40 CFR 61.70(a)(1) as referenced by 40 CFR 63.214(a)]
- ii. In the case of an existing source, the approved reporting schedule shall be used. In addition, quarterly reports shall be submitted exactly 3 months following the current reporting dates. [40 CFR 61.70(a)(2) as referenced by 40 CFR 63.214(a)]
- iii. In the case of an existing source or a new source which has an initial startup date preceding the effective date, the first report is to be submitted within 180 days of the effective date, unless a waiver of compliance is granted under §61.11 [40 CFR Part 61, Subpart A, *General Provisions*]. If a waiver of compliance is granted, the first report is to be submitted on a date scheduled by the Administrator. [40 CFR 61.70(b)(1) as referenced by 40 CFR 63.214(a)]
- iv. In the case of a new source which did not have an initial startup date preceding the effective date, the first report is to be submitted within 180 days of the initial startup date. [40 CFR 61.70(b)(2) as referenced by 40 CFR 63.214(a)]
- v. Unless otherwise specified, the owner or operator shall use the Test Methods in Appendix B to this part to conduct emission tests as required by paragraphs (c)(2) and (c)(3) of 61.70, unless an alternative method has been approved by the Administrator. If the Administrator finds reasonable grounds to dispute the results obtained by an alternative method, he may require the use of a reference method. If the results of the reference and alternative methods do not agree, the results obtained by the reference method prevail, and the Administrator may

notify the owner or operator that approval of the method previously considered to be alternative is withdrawn. [40 CFR 61.70(c) as referenced by 40 CFR 63.214(a)]

- 1) The owner or operator shall include in the report a record of the vinyl chloride content of emissions for each 3-hour period during which average emissions are in excess of the emission limits in §61.64(a)(1), (b), (c), or (d), or during which average emissions are in excess of the emission limits specified for any control system to which reactor emissions are required to be ducted in §61.64(a)(2) or to which fugitive emissions are required to be ducted in §61.65(b)(1)(ii), (b)(5), (b)(6)(ii), or (b)(9)(ii). The number of 3-hour periods for which average emissions were determined during the reporting period shall be reported. If emissions in excess of the emission limits are not detected, the report shall contain a statement that no excess emissions have been detected. The emissions are to be determined in accordance with §61.68(e). [40 CFR 61.70(c)(1) as referenced by 40 CFR 63.214(a)]
- 2) In polyvinyl chloride plants for which a stripping operation is used to attain the emission level prescribed in §61.64(e), the owner or operator shall include in the report a record of the vinyl chloride content in the polyvinyl chloride resin. [40 CFR 61.70(c)(2) as referenced by 40 CFR 63.214(a)]
 - (a) If batch stripping is used, one representative sample of polyvinyl chloride resin is to be taken from each batch of each grade of resin immediately following the completion of the stripping operation, and identified by resin type and grade and the date and time the batch is completed. The corresponding quantity of material processed in each stripper batch is to be recorded and identified by resin type and grade and the date and time the batch is completed. [40 CFR 61.70(c)(2)(i) as referenced by 40 CFR 63.214(a)]
 - (b) If continuous stripping is used, one representative sample of polyvinyl chloride resin is to be taken for each grade of resin processed or at intervals of 8 hours for each grade of resin which is being processed, whichever is more frequent. The sample is to be taken as the resin flows out of the stripper and identified by resin type and grade and the date and time the sample was taken. The corresponding quantity of material processed by each stripper over the time period represented by the sample during the 8-hour period, is to be recorded and identified by resin type and grade and the date and time it represents. [40 CFR 61.70(c)(2)(ii) as referenced by 40 CFR 63.214(a)]
 - (c) The vinyl chloride content in each sample is to be determined by Test Method 107 as prescribed in 40 CFR 61.67(g)(3). [40 CFR 61.70(c)(2)(iii) as referenced by 40 CFR 63.214(a)]
 - (d) The report to the Administrator by the owner or operator is to include a record of any 24-hour average resin vinyl chloride concentration, as determined in this paragraph, in excess of the limits prescribed in §61.64(e). The vinyl content found in each sample required by paragraphs (c)(2)(i) and (c)(2)(ii) of 61.70 shall be averaged separately for each type of resin, over each calendar day and weighted

according to the quantity of each grade of resin processed by the stripper(s) that calendar day, according to the equation referenced in 40 CFR 61.70(c)(2)(v).

The number of 24-hour average concentrations for each resin type determined during the reporting period shall be reported. If no 24-hour average resin vinyl chloride concentrations in excess of the limits prescribed in §61.64(e) are measured, the report shall state that no excess resin vinyl chloride concentrations were measured. [40 CFR 61.70(c)(2)(v) as referenced by 40 CFR 63.214(a)]

- (e) The owner or operator shall retain at the source and make available for inspection by the Administrator for a minimum of 3 years records of all data needed to furnish the information required by paragraph (c)(2)(v) of 61.70. The records are to contain the following information: [40 CFR 61.70(c)(2)(vi) as referenced by 40 CFR 63.214(a)] The records must be retained for five (5) years as required by Regulation 2.16, section 4.1.9.2.2.

- (1) The vinyl chloride content found in all the samples required in paragraphs (c)(2)(i) and (c)(2)(ii) of 61.70, identified by the resin type and grade and the time and date of the sample, and [40 CFR 61.70(c)(2)(vi)(A) as referenced by 40 CFR 63.214(a)]

- (2) The corresponding quantity of polyvinyl chloride resin processed by the stripper(s), identified by the resin type and grade and the time and date it represents. [40 CFR 61.70(c)(2)(vi)(B) as referenced by 40 CFR 63.214(a)]

- 3) The owner or operator shall include in the report a record of any emissions from each reactor opening in excess of the emission limits prescribed in §61.64(a)(2). Emissions are to be determined in accordance with 40 CFR 61.67(g)(5), except that emissions for each reactor are to be determined. The number of reactor openings during the reporting period shall be reported. If emissions in excess of the emission limits are not detected, the report shall include a statement that excess emissions have not been detected. [40 CFR 61.70(c)(3) as referenced by 40 CFR 63.214(a)]

c. **HAP - LDAR** (40 CFR 63 Subpart UU as referenced by 40 CFR Part 63 Subpart J)

- i. The owner or operator shall notify the Administrator no later than 30 days prior to the beginning of the next monitoring period of the decision to subgroup valves. The notification shall identify the participating process units and the number of valves assigned to each subgroup, if applicable, and may be included in the next Periodic Report. (40 CFR 63.1025(b)(4)(v) as referenced by 40 CFR 63.1410)
- ii. If applicable, the owner or operator shall submit in the periodic reports the information specified in 40 CFR 63.1025(b)(4)(vi)(A) and (b)(4)(vi)(B). (40 CFR 63.1025(b)(4)(vi) as referenced by 40 CFR 63.1410)

- 1) Total number of valves in each subgroup, and (40 CFR 63.1025(b)(4)(vi)(A) as referenced by 40 CFR 63.1410)
- 2) Results of the semiannual overall performance calculation required by 40 CFR 63.1025(b)(4)(iii). (40 CFR 63.1025(b)(4)(vi)(B) as referenced by 40 CFR 63.1410)
- iii. For the equipment specified in 40 CFR 63.1039(b)(1)(i) through (b)(1)(v), report in a summary format by equipment type, the number of components for which leaks were detected and for valves, pumps and connectors show the percent leakers, and the total number of components monitored. Also include the number of leaking components that were not repaired as required by 40 CFR 63.1024, and for valves and connectors, identify the number of components that are determined by 40 CFR 63.1025(c)(3) to be nonrepairable. (40 CFR 63.1039(b)(1) as referenced by 40 CFR 63.1410)
 - 1) Valves in gas and vapor service and in light liquid service pursuant to 40 CFR 63.1025(b) and (c). (40 CFR 63.1039(b)(1)(i) as referenced by 40 CFR 63.1410)
 - 2) Pumps in light liquid service pursuant to 40 CFR 63.1026(b) and (c). (40 CFR 63.1039(b)(1)(ii) as referenced by 40 CFR 63.1410)
 - 3) Connectors in gas and vapor service and in light liquid service pursuant to 40 CFR 63.1027(b) and (c). (40 CFR 63.1039(b)(1)(iii) as referenced by 40 CFR 63.1410)
 - 4) Agitators in gas and vapor service and in light liquid service pursuant to 40 CFR 63.1028(c). (40 CFR 63.1039(b)(1)(iv) as referenced by 40 CFR 63.1410)
 - 5) Compressors pursuant to 63.1031(d). (40 CFR 63.1039(b)(1)(v) as referenced by 40 CFR 63.1410)
- iv. Where any delay of repair is utilized pursuant to 40 CFR 63.1024(d), report that delay of repair has occurred and report the number of instances of delay of repair. (40 CFR 63.1039(b)(2) as referenced by 40 CFR 63.1410)
- v. Report, if applicable, the initiation of a monthly monitoring program for valves pursuant to 40 CFR 63.1025(b)(3)(i). (40 CFR 63.1039(b)(5) as referenced by 40 CFR 63.1410)
- vi. Report, if applicable, the initiation of a quality improvement program for pumps pursuant to 40 CFR 63.1035. (40 CFR 63.1039(b)(6) as referenced by 40 CFR 63.1410)
- d. **HAP (Non-VCM)**

See Comments 6 & 10.
- e. **TAP**

For Emission Points subject to Regulations 5.11 and 5.12, there are no reporting requirements. (See Comments 7, 8, and 9)

f. Preventive Maintenance Plan (PMP)

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for the PMP:

- 1) Emission Unit/Point ID number;
- 2) The beginning and ending date of the reporting period; and
- 3) A summary report of the preventive maintenance performed and any corrective actions taken.

5. U-LTX Alternative Operating Scenario

- a. In lieu of utilizing the FTO as a final control device to meet the applicable emission standards, Noveon may use the Vent Gas Absorber System (C-LPA-VGA) of Oxy Vinyls, LP (OxyVinyls), as a secondary, and final, control for its Recovery System. When OxyVinyls' VGA is used, neither the FTO nor the Scrubber shall be used, and the only atmospheric discharge shall occur through OxyVinyls' S-LPA-CL-1P.
- b. In accordance with Regulation 2.16, section 4.1.17.1, the owner or operator shall administer the following protocol and these records shall be made available to the District upon request:

Reciprocal Control Procedures

Procedure: This procedure outlines the required steps when venting Latex emissions from Noveon, Inc. to the VGA System at Oxy Vinyls, LP as well as the required steps when Oxy Vinyls, LP vents the emissions from LPA to the FTO. The Protocol Steps are the same regardless of the flow.

Protocol Steps:

Approval: The Venter (the company venting the emissions) must contact the Recipient (the company receiving the emissions/vent gas) for approval before opening any valves for the purpose of venting emissions to the Recipient. Once approval is granted by a supervisor from each company, the venting may occur.

Communication: The Venter must contact the Recipient at least once every 8 hours to confirm the venting activity is occurring.

Closure: Once the venting has stopped, the Venter must confirm with the Recipient that all flow has ceased and the valving has been secured for non-venting activity.

When venting from Oxy Vinyls, LP to the FTO at Noveon, Inc:

Prior to opening the vent line from the LPA to the FTO at Noveon, a supervisor must be notified and approval must be obtained from the supervisor. The system shall be monitored to ensure no upsets occur in the system. The Process Engineer shall be notified if there are any questions or problems.

When venting from Noveon, Inc. to the VGA at Oxy Vinyls, LP:

Prior to opening the vent line from Latex to the VGA system at Oxy Vinyls, LP, a supervisor must be notified and approval must be obtained from the supervisor. The system shall be monitored to ensure no upsets occur in the system. The Process Engineer shall be notified if there are any questions or problems.

- c. The owner or operator shall maintain a log that includes the date and time of each change in

6. **Equivalency Determination**

The owner or operator may, pursuant to an equivalency granted for 40 CFR 61.70 (c)(2)(i), composite individual batch samples only if the batches are the same grade latex resin; have approximately the same yield and total solids content; and have an expected residual vinyl chloride content of less than 250 ppm. Composite samples shall then be analyzed per EPA Test Method 107, Determination of Vinyl Chloride Content of Polyvinyl Chloride Resin, within 36 hours of taking the first sample. Additionally, the compositing procedure shall be compared with the reference procedure once per month. (See Comment 12)

7. **Control Requirements**

a. **HAP/VOC**

Pursuant to 40 CFR 61.64 and 61.65, the owner or operator shall operate a Recovery System, C-LTX-RCVRY, and an FTO, C-LTX-TK-FTO-1, to control vinyl chloride emissions as follows:

- i. The FTO shall be controlled by the Scrubber, which shall be the only atmospheric discharge point (via stack S-LTX-TK-SCR-1).
- ii. The owner or operator shall demonstrate compliance with the 10 ppm emission standard (three-hour average) by:
 - 1) Continuously monitoring the concentration of VCM in the exhaust stream; or
 - 2) Continuously monitoring the FTO's oxidation chamber temperature to confirm operation at the minimum temperature of 1713 °F at temperature probe TI312A3.
 - (a) If probe TI312A3 malfunctions, then probe TI312A1 may be used until probe TI312A3 resumes proper functioning. While operating under this scenario, the minimum temperature of 1843 °F shall be maintained.
 - (b) If probes TI312A3 and TI312A1 malfunction, then probe TY310 may be used until either the other probes resume proper functioning. While operating under this scenario, the minimum temperature of 1377 °F shall be maintained.

- iii. When monitoring the concentration of VCM in the exhaust stream, periods of excess emissions shall be classified as any three-hour period during which the average concentration of VCM exceeds 10 ppm.
- iv. When monitoring the FTO's oxidation chamber temperature, periods of excess emissions shall be classified as any three-hour period during which:
 - 1) Pursuant to EPA's equivalency letter of 2 November 1998 and the requirements of 40 CFR 61.70(c)(1), the average oxidation chamber temperature is more than 50 degrees below the oxidation chamber temperature determined during the latest performance test when compliance was demonstrated, as specified in Additional Condition 7.b.ii (*where the temperatures already have been decremented by 50 degrees*); and
 - 2) The average concentration of VCM exceeds 10 ppm.

Comments/Explanations

1. Noveon has demonstrated that its potential VOC emissions are less than 450 pounds per hour and 3000 pounds per day for each facility (i.e., Emission Point) subject to Regulation 6.24 (section 3.3). Since this demonstration is based on uncontrolled VOC emissions, no additional monitoring, record keeping, or reporting are required to demonstrate continued compliance with the emission standards in Regulation 6.24, section 3.3. There are no Class I or Class II solvents used at this plant for processes subject to Regulation 6.24.
2. Because the potential controlled VOC emissions increase resulting from the reconstruction of Reactors E-LTX-PLY 46 and 48 and construction of Reactors E-LTX-PLY 29, 30, 45 and 47 are less than 40 tons per year, and the potential controlled VCM emissions increase will be less than 1 ton per year, there is no significant emissions increase, as defined in Regulation 2.05, *Prevention of Significant Deterioration of Air Quality* (Appendix A). Therefore, NSR/PSD does not apply and the source is not required to accept an emission cap or an operation limit to avoid said requirements.
3. Noveon's cumulative plant-wide Regulation 7.25 VOC PTE baseline for Emission Points subject to this regulation installed on or after December 17, 1987 is 1.1 TPY. For baseline emissions prior to the construction/reconstruction of Reactors E-LTX-PLY 29, 30, 45, 46, 47 and 48, refer to Noveon's January 9, 2001 submittal, *Potential-to-Emit Calculations for Regulation 7.25, Version 3*.
4. Per APCDJC's May 17, 2000 Position Statement on APCDJC Regulation 7.25, a VOC BACT Evaluation is not required to be performed for Emission Points subject to this regulation installed on or after December 17, 1987 until such time as a construction or modification subject to this regulation results in the cumulative source-wide VOC PTE baseline exceeding 5 TPY, provided the associated VOC PTE is in excess of 1 TPY.

Because Noveon's cumulative source-wide Regulation 7.25 VOC PTE baseline for Emission Points subject to Regulation 7.25 remains less than 5 TPY with the construction/reconstruction of Reactors E-

LTX-PLY 45, 46, 47 and 48, the subject Reactor Emission Points are exempt from the VOC BACT requirements of APCDJC Regulation 7.25. However, it should be noted that the VCM Control System is considered BACT for APCDJC Regulation 7.25.

5. The final MACT Rule 40 CFR Part 63 Subpart J - National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production was promulgated by EPA on July 10, 2002.
6. The U-LTX Reactors are not exclusively dedicated to polyvinyl chloride and copolymer production. Other, non-vinyl chloride, products can be produced in these reactors. Consequently, the requirements of 40 CFR Part 61 Subpart F and 40 CFR Part 63 Subpart J only apply when the subject U-LTX Reactors are in VCM service. However, the PTE for HAP emissions from Reactor Emission Points E-LTX-PLY-29/30/45/46/47/48, when not subject by the MACT, will be less than 10 tons per year any single HAP and less than 25 tons per year for total HAPs. Therefore, APCDJC Regulation 5.16, *Control Technology Requirements for New and Reconstructed Major Stationary Sources of Hazardous Air Pollutants*, is not applicable to this project, pursuant to Sections 2.1 and 1.4.2 of that regulation.
7. The VCM Control System is considered BACT for Regulation 5.12.
8. The requirements of APCDJC Regulation 5.12, *New or Modified Sources Emitting Toxic Air Pollutants*, do not apply to Vinyl Chloride. (Vinyl Chloride is not a regulated TAP constituent.) In addition, TAPs that are HAP constituents exclusively associated with polyvinyl chloride and copolymer production (*i.e.*, always governed by 40 CFR Part 63 Subpart J (MACT)), are exempt from the requirements of APCDJC Regulation 5.12. Note, per the Preamble to the July 10, 2002 Final Rule for 40 CFR Part 63 Subpart J, VCM is “considered a surrogate for all HAP from the Reactor” during polyvinyl chloride and copolymers production. (The VCM Control System is TAP BACT when TAPs are not HAP constituents governed by a MACT.) See Comment 7.
9. Additional Condition 2.e establishes monitoring requirements for demonstrating compliance with Regulations 5.11 and 5.12, standards of performance for emitting toxic air pollutants (TAPs). This condition is a surrogate for hourly emissions records and will monitor ongoing compliance. Note that VOC and HAP emissions record keeping and reporting are specified elsewhere in this permit.
10. The potential controlled emissions of non-VCM HAPs *are* below the limits in Additional Condition 1.d.
11. Noveon (then BFGoodrich) proposed the alternate sampling procedure described in Additional Condition 5, for the Louisville plant only, in a 27 June 1983 letter and modified in a 21 November 1983 letter allowing batch samples to be composited. This procedure was approved 1 December 1983 as an equivalency for 40 CFR 61.70(c)(2)(i).
12. VCM Control System

On 22 July 1998, the District petitioned EPA, on behalf of Noveon (then BFGoodrich), for an Equivalency to monitor the FTO's oxidation chamber temperature in lieu of the required vinyl chloride monitoring system. This equivalency was granted in EPA's letter of 2 November 1998. The alternate monitoring procedure described in Additional Condition 7.ii(2) results from this equivalency.

Note: this system is considered BACT for Regulations 5.12 and 7.25.

13. None of the valves have been divided in subgroups.
15. There are no compressors or pumps subject to the requirements of 40 CFR Part 63, Subpart UU.
16. Noveon, Inc. is eligible for an exemption from the requirements of monthly valve monitoring by 63.1025(e)(3), since there are fewer than 250 valves in vinyl chloride service. Only quarterly monitoring is required.
17. Noveon, Inc. operates twenty fixed monitors in the Vycar process area that are sampled and analyzed by a gas chromatograph (GC) using a flame ionization detector. The GC analyzes twenty streams in succession on a ninety second cycle per stream. All twenty streams have a continuous flow with access to the GC controlled through solenoid valves. Sample analyses are specific for vinyl chloride. Noveon, Inc. submitted a revised VCM Leak Detection and Elimination Program on August 29, 2002 which the District approved on September 15, 2002.
18. In vinyl chloride service means that a piece of equipment either contains or contacts a liquid that is at least 10 percent vinyl chloride by weight or a gas that is at least 10 percent by volume vinyl chloride as determined according to the provisions of §61.67(h).

U-GAS Emission Unit Description: Unleaded Gasoline Storage**U-GAS Applicable Regulations**

Federally Enforceable Regulation		
Number	Subject	Sections
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	1 through 6

District Only Enforceable Regulation		
Number	Subject	Sections
5.14	Hazardous Air Pollutants and Source Categories	1 and 2

U-GAS Emission Point						
ID ("E-GAS-" Prefix)	Description	Applicable Regulation(s)	Allowable Emission/ Equipment Standard	Control Device		Stack ID ("S-GAS-" Prefix)
				ID ("C-GAS-" Prefix)	Type	
GSTK	AGST Unleaded Gasoline (APCD Station ID: 1957)	7.15, sec 3	Stage I vapor recovery system	N/A	N/A	GSTK

†Compliance Monitoring Reference Code: **NONE** - No Compliance Monitoring is required.

U-GAS Additional Conditions:1. **Standards** (Regulation 2.16, section 4.1.1)

Storage tanks shall be equipped with the following:

- a. A submerged fill pipe;
- b. If the gasoline storage tank is equipped with a separate gauge well, a gauge well drop tube shall be installed which extends to within six inches of the bottom of the tank;
- c. Vent line restrictions on the affected facility; and
- d. Vapor balance system and vapor tight connections on the liquid fill and vapor return hoses. The cross-sectional area of the vapor return hose and any other vapor return passages in the circuit connecting the vapor space in the service station tank to that of the truck tank must be at least 50% of the liquid fill hose cross-sectional area for each tank and free of flow restrictions to achieve acceptable recovery. The vapor balance equipment must be maintained according to the manufacturer's specifications. The type, size and design of the vapor balance system are subject to the approval of the District.

2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

There are no monitoring requirements.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

There are no record keeping requirements.

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

There are no reporting requirements.

Solvent Metal Cleaning Equipment**Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Number	Title	Sections
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1 through 4

Solvent Metal Cleaning Equipment Emission Points						
ID	Description	Applicable Regulation(s)	Allowable Emission/ Equipment Standard	Control Device		Stack ID
				ID	Type	
N/A	Various <i>Cold</i> Solvent Metal Cleaning Equipment	6.18	See AC 1	N/A	N/A	N/A

Additional Conditions:**1. Standards** (Regulation 6.18, Sections 3 and 4)**VOC**

- a. The owner or operator shall install, maintain, and operate the control equipment as follows: (Regulation 6.18, section 4.1)
 - i. The cleaner shall be equipped with a cover. If the VOC is agitated or heated, then the cover shall be designed so that it can be easily operated with one hand.
 - ii. The cleaner shall be equipped with a drainage facility such that VOC that drains off parts removed from the cleaner will return to the cleaner.
 - iii. A permanent, conspicuous label summarizing the operating requirements specified in Additional Condition 1.b. shall be installed on or near the cleaner.
 - iv. If used, the VOC spray shall be a fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not cause excessive splashing.
 - v. If the VOC is heated above 120°F, then one of the following control devices shall be used:
 - a) Freeboard that gives a freeboard ratio equal to or greater than 0.7,
 - b) Water cover (VOC must be insoluble in and heavier than water), or
 - c) Other systems of equivalent control, such as a refrigerated chiller or carbon absorption.
- b. The owner or operator shall observe at all times the following operating requirements: (Regulation 6.18, section 4.2)
 - i. Do not dispose of waste VOC or transfer it to another party in a manner that more than 20% by weight of the waste VOC can evaporate into the atmosphere. Store waste VOC only in covered containers,
 - ii. Close degreaser cover whenever not handling a part in the cleaner,
 - iii. Drain cleaned parts until dripping ceases (15 seconds is usually necessary), and
 - iv. Do not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).

2. Monitoring**VOC**

- i. The owner or operator shall conduct monthly inspections to verify continued compliance with the requirements specified in Additional Condition 1.a.
- ii. See Additional Condition 3.a.

3. Record Keeping

VOC

- a. The owner or operator shall maintain records that include the following for each purchase: (Regulation 6.18, section 4.4.2)
 - i. The name and address of the solvent supplier,
 - ii. The date of the purchase,
 - iii. The type of the solvent, and
 - iv. The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).
- b. All records required in Additional Condition 3.a. shall be retained for 5 years and made available to the District upon request. (Regulation 6.18, section 4.4.3)

4. Reporting

VOC

There are no compliance reporting requirements for Regulation 6.18.

Source-wide TAP Emissions Limits		
TAP	Regulation	Allowable Emissions
Acetone	5.11/5.12	2376.5
Acrylamide	5.11/5.12	RACT/BACT
Acrylic acid	5.11/5.12	40.05
Ammonia	5.11/5.12	24.03
Chlorine	5.12	6.85
Formaldehyde	5.11/5.12	RACT/BACT
Hydrogen chloride	5.11/5.12	3.76
Methacrylic acid	5.12	93.46
Styrene	5.11	287.05
Vinyl acetate	5.11	40.05

The above emission limits are established pursuant to District regulations 5.11 and 5.12 and are District only enforceable. Additional emission limits for the same pollutants are imposed by other regulations, and the more stringent limit applies.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-permit Documents

<u>Document</u>	<u>Date</u>
MOCS, Version 1	June 7, 2000
RMP (Risk Management Plan) Note, the original RMP for this source was submitted by The BFGoodrich Company on June 18, 1999, meeting the required RMP submittal date of 21 June 1999.	February 28, 2001
VOC - Reg 6.24 One-time Compliance Demonstration	February 10, 1999 May 24, 2001
VOC - Reg 7.25 One-time Compliance Demonstration	January 9, 2001
PM - Regulations 6.09 and 7.08 One-time Compliance Demonstration	October 9, 2001 December 21, 2001

Alternative Operating Scenario

<u>Description</u>	<u>Emission Unit</u>
Oxy Vinyls, LP provides alternate VCM control	U-LTX

Source-wide HAP Speciation			
HAP	CAS No.	HAP	CAS No.
Acrylamide	79-06-1	Formaldehyde	50-00-0
Acrylic Acid	79-10-7	Hydrochloric Acid	7647-01-0
Acrylonitrile	107-13-1	Methyl Methacrylate	80-62-6
Antimony Compounds	N/A	Polycyclic Organic Matter	N/A
Cadmium Compounds	N/A	Styrene	100-42-5
Chlorine	7782-50-5	Vinyl Acetate	108-05-4

Chromium Compounds	N/A	Vinyl Chloride	75-01-4
Ethyl Acrylate	140-88-5	Vinylidene Chloride	75-35-4
Bis(2-Ethylhexyl)phthalate	117-81-7		

Note: HAPs cited in the table above are those currently known to be used at this plant.

*Note, the original RMP for this source was submitted by The BFGoodrich Company on 18 June 1999, meeting the required RMP submittal date of 21 June 1999.

Insignificant Activities		
Description	Quantity	Basis
Emergency Relief Vents or Ventilating Systems not otherwise regulated.	Various	Regulation 2.02, section 2.3.10
Indoor PM Collectors Venting Indoors	Various	Regulation 2.02, section 2.3.21
Internal Combustion Engines, Fixed or Mobile	Various	Regulation 2.02, section 2.2
Brazing, Soldering, or Welding Equipment	Various	Regulation 2.02, section 2.3.4
Woodworking, Except Conveying, Hogging, or Burning Wood/Sawdust	Various	Regulation 2.02, section 2.3.5
Lab Ventilating and Exhausting Systems, Non-radioactive Materials	Various	Regulation 2.02, section 2.3.11
Blast Cleaning, Abrasives in Water	Various	Regulation 2.02, section 2.3.13
Soil or Groundwater Contamination Remediation, Passive or Total Removal	As needed	Regulation 2.02, section 2.3.20
Emergency Generators and associated propane tanks	Various	USEPA White Papers. (Uses propane as fuel.)
Miscellaneous Drums and Totes	Various	No known underlying applicable requirement.
Miscellaneous Tote Bin Station(s)	Various	No known regulated emissions to the atmosphere.
Pressurized Storage Vessels (VOC and non-regulated/non-VOC materials)	Various	Regulation 2.02, section 2.3.26 (VOC) or no known underlying applicable requirement (non-regulated/non-VOC)
Settling Pits	Various	No known underlying applicable requirement.
Cooling Towers	Various	No known underlying applicable requirement. No Cr-based additives.
VOC Storage Vessels \leq 250 gallons	Various	Regulation 2.02, section 2.3.24
Bulk Unloading and Loading	Various	No known regulated emissions to the atmosphere. (For loading/unloading involving particulate materials, negligible PM may be discharged to the ground when loading/unloading hoses are disconnected.)
Miscellaneous PM Containers/Equipment	Various	No known regulated emissions to the atmosphere.

1. Insignificant Activities are only those activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
2. Activities identified in Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the Title V permit.
 - a. No facility, having been designated as an insignificant activity, shall be exempt from any generally applicable requirement which shall include a < 20% opacity limit for facilities not otherwise regulated.
 - b. No periodic monitoring shall be required for facilities designated as insignificant activities.

Appendix A: Preventive Maintenance Program**Procedure for Title V Control Device Preventative Maintenance**

1. A preventative maintenance work order is set up in the computerized work order system for each applicable Title V control device in the plant. This includes most bag houses, cyclones, and wet scrubbers.
2. All new installations of applicable control devices will be entered into the computerized work order system with the appropriate inspection frequency.
 - a. The manufacturing department will determine the inspection frequency based on good engineering practices.
 - b. The person responsible for the new installation is also responsible for ensuring the appropriate party enters the new equipment into the Preventative Maintenance Program.
3. The preventative maintenance work orders are generated at the beginning of each month. The equipment is tagged for inspection and then scheduled for a shutdown. It is the responsibility of the production maintenance coordinator to ensure each inspection is completed.
4. Equipment and inspection frequencies are listed in the table, below.
5. For each applicable bag house, the following items will be performed during each inspection:
 - a. The integrity of the unit will be visually inspected for excessive wear or damage.
 - b. The filter media will be visually inspected for excessive wear or damage. They will be replaced as necessary.
 - c. The cages will be inspected for damage and replaced as necessary.
 - d. The unit's pulse air will be inspected. This includes inspecting and replacing the solenoids and diaphragms as necessary.
6. For each applicable cyclone, visually inspect the vessel integrity.
7. For each applicable wet scrubber, the following items will be performed during each inspection:
 - a. Visual inspection of the vessel integrity.
 - b. Inspect the pumps and repair as necessary.
 - c. Inspect spray ring and nozzles, cleaning as necessary.

8. For the chlorine scrubber, the following items will be performed during the inspection:
- a. Quarterly: Visual inspection of scrubber recirculation pump. This includes checking the oil pressure, flush piping, seals, coupling guard condition, and base and overall pump integrity.
 - b. Semi-annually:
 - i) Inspection item in 8.a., above, plus;
 - ii) Visual inspection of the condenser, knock out bottle, and the venturis. This includes checking the overall condition of the tank for any wear or corrosion, as well as checking the condition of the flanges, bolts, insulation, paint, and base support.
 - c. Three-Year Turnaround:
 - i) Inspection items 8.b., above, plus;
 - ii) Calibration check of the hi-level indicators in each caustic storage tank.
 - iii) Calibration check of the level indicator and temperature transmitter in the 50% caustic storage tank.
 - iv) Inspect and repair as necessary air operators on the eductor VSPs and control valves.
 - v) Calibration check of the eductor flow meters.
 - vi) Inspect and repair as necessary the reactor and scrubber emergency vent VSPs.
 - vii) Outside inspection contractor to complete tank wall thickness inspection.

Computerized Record Keeping

The completion date for the inspection of each control device will be recorded electronically. Specific details of each inspection will be noted only by exception or unusual finding. Any unusual inspection findings will be documented and addressed on a case-by-case basis.

Noveon Preventive Maintenance Program (PMP)				
Equipment Number (Title V Info.)	Description	Task Name	Frequency	Source
Compounding Area (U-CMP, unless otherwise noted)				
48-SED-3C-2	Cooler 1C-2 Dust Collector	Insp. Dust Collector	QTR	CLR-1C-2 HPR-1C-2
48-SED-3EC-2	Pellet Cooler 1EC-2 Cyclone	Insp. Cycl.	QTR	CLR-1EC-2
48-SED-4EC-2	Pellet Cooler 2EC-2 Cyclone	Insp. Cycl.	QTR	CLR-2EC-2
48-SED-1M-2	No. 1 Resin Day Bin Dust Collector	Insp. Dust Collector	AN	DB-1M-2
48-SED-2M-2	No. 2 Resin Day Bin Dust Collector	Insp. Dust Collector	AN	DB-2M-2
48-SED-3M-2	Mixer 1M-2 Dust Collector	Insp. Dust Collector	QTR	MI-1M-2 HPR-3M-2
48-SED-2R(U-RES)	Silo 2A Dust Collector	Insp. Dust Collector	2 YR	TK-2R
48-SED-3R(U-RES)	Silo 3A Dust Collector	Insp. Dust Collector	2 YR	TK-3R
49-SED-1B-1	Blend Silo 1B Dust Collector	Insp. Dust Collector	AN	BS-1B-1
49-SED-2B-1	Blend Silo 2B Dust Collector	Insp. Dust Collector	AN	BS-2B-1 LS-1L-1
49-SED-3B-1	Blend Silo 3B Dust Collector	Insp. Dust Collector	AN	BS-3B-1 LS-2L-1
49-SED-4B-1	Blend Silo 4B Dust Collector	Insp. Dust Collector	AN	BS-4B-1 LS-3L-1
49-SED-5B-1	Blend Silo 5B Dust Collector	Insp. Dust Collector	AN	BS-5B-1 LS-4L-1
49-SED-6B-1	Blend Silo 6B Dust Collector	Insp. Dust Collector	AN	BS-6B-1 LS-5L-1
49-SED-2D	B-31 Central Vacuum Cleaning System Collector	Insp. Dust Collector	AN	SED-1D FE-14FM-2
49-SED-1L-1	Bulk Loading Hopper Dust Collector	Insp. Dust Collector	2 YR	HPR-1L

QTR - Quarterly
 SA - Semi-annually
 AN - Annually

2 YR - Every second year
 3 YR - Every third year

Noveon Preventive Maintenance Program (PMP)				
Equipment Number (Title V Info.)	Description	Task Name	Frequency	Source
49-SED-1M-1	No. 1 Resin Day Bin Dust Collector	Insp. Dust Collector	AN	DB-1M-1
49-SED-3M-1	Mixer 1M-1 Dust Collector	Insp. Dust Collector	QTR	MI-1M-1 HPR-5M-1
49-SED-4M-1	No. 2 Resin Day Bin Dust Collector	Insp. Dust Collector	AN	DB-2M-1
49-SED-1P-1	Hopper 1P-1 Dust Collector	Insp. Dust Collector	AN	HPR-1P-1
49-SED-2P-1	Hopper 2P-1 Dust Collector	Insp. Dust Collector	AN	HPR-2P-1
48-SED-3D	B-31 Weigh Station Collector	Insp. Dust Collector	2 YR	B-31WS
49-SED-4D	B-3 Weigh Station Collector	Insp. Dust Collector	2 YR	B-3WS
Resin Area (U-RES)				
63-C2-SED-2 (SED-2C)	Dump Station Dust Collector	Insp. Dust Collector	AN	TK-2F
63-C2-SED-9 (SED-9C)	Silo Dust Collector	Insp. Dust Collector	2 YR	TK-9C
63-C2-SED-10 (SED-10C)	Silo Dust Collector	Insp. Dust Collector	2 YR	TK-10C
63-C8-SED-15(SED-15C)	Silo Dust Collector	Insp. Dust Collector	2 YR	TK-15C
63-F1-SED-2(SED-2F)	Soda Ash Silo Dust Collector	Insp. Dust Collector	AN	TK-6F
63-J1-SED-1(SED-1J1)	Dryer Separator - A-line	Insp. Cycl.	QTR	DR-1J
63-J1-SED-2(SED-2J1)	Dryer Separator - A-line	Insp. Cycl.	QTR	DR-1J
63-J3-SED-1(SED-1J)	B-31 Hopper Dust Collector	Insp. Dust Collector	2 YR	HPR-1J3
63-J3-SED-8(SED-8J)	Bagger Dust Collector	Insp. Dust Collector	2 YR	BAGR-1J
63-J3-SED-2(SED-2J3)	Silo Dust Collector	Insp. Dust Collector	AN	TK-6A

QTR - Quarterly
 SA - Semi-annually
 AN - Annually

2 YR - Every second year
 3 YR - Every third year

Noveon Preventive Maintenance Program (PMP)				
Equipment Number (Title V Info.)	Description	Task Name	Frequency	Source
63-J3-SED-3(SED-3J3)	Silo Dust Collector	Insp. Dust Collector	AN	TK-1A
63-J3-SED-4(SED-4J3)	Silo Dust Collector	Insp. Dust Collector	AN	TK-8J
63-J3-SED-5(SED-5J3)	Silo Dust Collector	Insp. Dust Collector	AN	TK-9J
63-J3-SED-6(SED-6J3)	Silo Dust Collector	Insp. Dust Collector	AN	TK-13J
63-J3-SED-7(SED-7J3)	Silo Dust Collector	Insp. Dust Collector	AN	TK-14J
63-J4-SED-1(SED-1J4)	Dryer Wet Scrubber - A-line	Insp. Wet Scrubber	QTR	DR-1J
63-J11-SED-13(SED-13J)	Dryer Separator - B-line	Insp. Cycl.	QTR	DR-2J
63-J11-SED-14(SED-14J)	Dryer Separator - B-line	Insp. Cycl.	QTR	DR-2J
63-J12-SED-15(SED-15J)	Dryer Wet Scrubber - B-line	Insp. Wet Scrubber	QTR	DR-2J
63-J13-SED-16(SED-16J)	Day Silo Dust Collector	Insp. Dust Collector	AN	TK-16J
63-J13-SED-17(SED-17J)	Day Silo Dust Collector	Insp. Dust Collector	AN	TK-17J
SED-9J	No. 1 Over-the-Track Silo Dust Collector	Insp. Dust Collector	2 YR	TK-1J
SED-19J	No. 2 Over-the-Track Silo Dust Collector	Insp. Dust Collector	2 YR	TK-2J
63-N-SED-4(SED-4N)	Silo Dust Collector	Insp. Dust Collector	AN	TK-4N
63-D19-SCRUBBER-1 (SCRBR)	Chlorine Scrubber	Insp. Pump Insp. Tank PSM Ck. PSM Insp	QTR SA 3 YR 3 YR	Various
SED-10J	Silo Dust Collector	Insp. Dust Collector	AN	TK-7J

QTR - Quarterly
SA - Semi-annually
AN - Annually

2 YR - Every second year
3 YR - Every third year